COMMERCE AMERICA

FORMERLY COMMERCE TODAY

U.S. Department of Commerce / April 12, 1976

THE ECONOMY

Consumers Turn The Tide

Newsmemo

Views of the broadest base of interested groups and individuals are being solicited on the issue of corporate payments abroad. President Ford made that plain in his statement setting up the Cabinet-level Task Force on Questionable Corporate Payments Abroad. The President set this objective before the group, which is about to begin its deliberations under the leadership of Commerce Secretary Richardson: "To the extent that the questionable payments abroad have arisen from corrupt practices on the part of American corporations, the United States bears a clear responsibility to the entire international community to bring them to a halt."

Food price trends are pointing toward more consumer discontent. In 1960, according to the Department of Agriculture, U.S. consumers spent 16.1 percent of their disposable income on food consumed at home. This proportion declined during the 1960s and early 1970s to 12.5 percent in 1973. The trend reversed in 1974, when the proportion rose to 13.0 percent, and the spending climb continued in 1975, reaching 13.1 percent by the end of the year.

Despite major clean-up efforts by many industrial water users, a considerable number will probably fail to meet a July 1, 1977, pollution control deadline. A major cause of delay is uncertainty over Environmental Protection Agency guidelines, which are now being challenged in lawsuits. Long lead times are required for design, construction and perfecting of water treatment systems. Manufacturing establishments that do not have anti-pollution programs well under way are unlikely to meet the mid-1977 deadline.

Water pollution compliance is expected to put relatively few plants out of business. Plants expected to close because of compliance costs are high-cost, marginal operations that in many cases would have been phased out over the next decade. Affected operations are concentrated in a few industries: pulp and paper, textile finishing, fruit and vegetable processing, dairy products, meat packing. Plants that are targets for shutdowns represent about 5-10 percent of the capacity of each industry.

Arkansas is coming to Europe in June. A new state office in Brussels will seek to attract investment from Western Europe and to sell Arkansas industrial and agricultural products throughout the Common Market area. The state is described to Europeans as at the center of 70 million Southwest U.S. customers, having an Arkansas River transport system like the Rhine or Ruhr, peopled with skilled workers, and supplied with ample power. The office will have an Arkansas bank marketing officer and a Copenhagen-born businessman serving side by side as its directing officials.

Competitive market forces are highly visible in the price patterns for mass-consumption containers. Three-way competition among steel cans, aluminum cans and glass containers has served to modify price rises. Metal can prices have risen at a much faster rate over the past two years than glass container prices. The differential has given glass a price advantage during the past year, particularly in beer containers, a major market for both metal and glass. There price discounting has given glass an added boost. Discounts, incentive programs and adjustments of price increases are very much a part of the container sales picture at this time.

A cautious view of worldwide economic recovery. That is one way to summarize a new report on planned 1976 capital spending by foreign affiliates of U.S. companies. Such expenditures are expected to increase only 2 percent this year, according to December plans. When the affiliates were surveyed last June they projected a 12 percent increase in capital spending abroad for 1976.

An exhibition in Tehran produced the largest sales in the 15-year history of U.S. Trade Centers abroad. The Feb. 15-19 show of energy systems and equipment ended with the 19 U.S. exhibiting companies projecting $78.6 million in resultant sales over the next year. Actual floor sales of $3.3 million represented another remarkable achievement. In Iran, it is apparent, a small number of exhibitors working with a solid marketing mix can meet with a limited buying audience and produce impressive results.

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COVER: 1975 ended with a surge in consumer spending, probably stronger than anticipated by retailers, which continues into 1976 with indications that it will continue to set the pace of the nation's economic recovery, says Commerce Secretary Richardson in an economic status report beginning on page 4.

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Swift Recovery For Profits

Economic Highlights is prepared by Maynard Comiez, Acting Chief Economist for the Department of Commerce.

The turnaround in corporate profits in 1975 coincided with the economy's swing from recession to recovery, and by the fourth quarter, profits had rebounded sharply from the low point in the first quarter of the year. Furthermore, in comparison with 1974, a much larger proportion of profits represented earnings from current operations rather than "inventory profits." Current developments, as well as the pattern in previous economic expansions, suggest that profit growth will continue in 1976.

In the fourth quarter of 1975, corporate profits before taxes were $133.8 billion at an annual rate, slightly higher than the level for the full year 1974, a record, but still below the 1974 third quarter record of $146.7 billion. The rebound appears more moderate if allowance is made for the effects of taxes and inflation. Measured in 1972 dollars, after-tax profits in the fourth quarter were at an annual rate of $60.9 billion, a gain of 28 percent from the first quarter but still 11 percent below the 1974 level.

Another perspective on profits can be obtained by adjusting for the impact of price changes on inventory valuations. In times of rapidly increasing prices, the higher valuations of inventories are translated into higher profits. The inventory valuation adjustment (IVA) corrects for this phenomenon. As indicated in the first chart, there were times in 1974 when these "inventory profits" accounted for all of the quarterly increases in profits. The inventory profits were smaller in 1975, because (1) the price valuations of goods held in inventory rose at a less rapid rate, and (2) there were fewer goods held in inventory after the unprecedented liquidations in the first and second quarters.

Profits tend to move up strongly following the trough of a recession. As depicted in the second chart, profits before taxes recovered faster than in any other postwar economic recovery except the cycle of 1958. In fact, many of the characteristics of that cycle were similar to the current one. Both the 1957-58 and 1973-75 recessions were unusually severe and both were marked by unusually heavy inventory buildups. In both 1958 and 1975, profits had increased 38 percent after the recovery had been under way for three quarters.

Productivity changes are frequently related to changes in volume of output over short periods of time, and both make up part of the dynamics of profits. As shown in chart 3, business product prices generally were rising over the past three years. The rate of worker compensation was also rising, but this was more than offset by rising productivity during the recovery; thus labor cost per unit of output started declining during 1975. During the second quarter, productivity increased at a stunning 15.3 percent annual rate, and the labor cost per unit of output declined 6.7 percent. The profit per unit of output soared at an unprecedented rate, and there were further, though more limited, gains in the third and fourth quarters. While corporations also must contend with non-labor costs, these expenses are small in relation to labor costs. As indicated in the chart, these developments in 1975 stand in sharp contrast to the production behavior in the two prior years when unit labor costs generally accelerated because of declining productivity.

Two more commonly used profit measures are after-tax profits per dollar of sales and the rate of return on stockholders' equity. After-tax profits per dollar of sales in all manufacturing corporations dropped from 5.7 cents in the peak third quarter of 1974 to 3.7 cents in the severely depressed first quarter of 1975. Also, the rate of return on stockholders' equity slid from 15.4 percent to 9.0 percent. By the fourth quarter of 1975, however, profits per sales dollars had returned to 5.0 cents, and the rate of return had revived to 12.9 percent.

The recovery of profits is vital in sustaining the rise in production and reducing unemployment. American business typically finances a substantial portion of its capital investment internally. As cash flow—undistributed profits plus depreciation—to business swells, it provides an impetus to investment in structures and equipment. Because the recent recession was marked by a sharp decline in business investment, increased cash flow seems particularly important in sustaining economic growth. Indications are that this year firms will be able to finance a larger portion of investment from internal funds as compared with the recent past. Other factors, however, are important in planning and implementing investment. These include the rate of capacity utilization, the outlook for sustained sales, and finance.

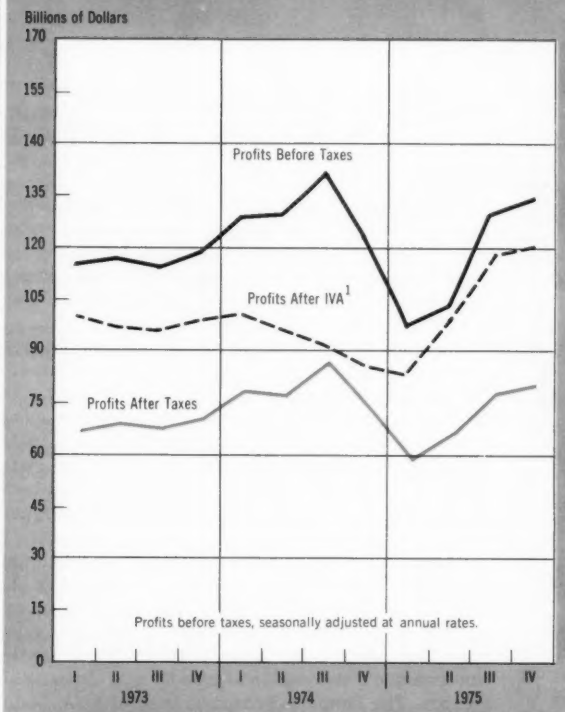
Aside from these complications, it is generally true that increases in fixed investment closely follow cash flow improvement resulting from rising business sales. The recent interaction of these variables is shown in chart 4. The series graphed there are the combined manufacturing and trade sales, the cash flow of nonfinancial corporations, and business fixed investment. During 1975 business sales advanced 8.4 percent from the first to the fourth quarter. The nonfinancial corporate cash flow correspondingly rose 29.5 percent. The especially sharp rebounds in each of these two series in the third quarter brought their levels above their previous peaks in the third quarter of 1974.

Rather than using the current dollar measure, however, it is more appropriate to assess the change in cash flow in terms of the purchasing power of the flow relative to investment. In constant 1972 dollar terms, real cash flow by the last quarter of 1975 had risen 24 percent from its recession low and had returned to its third quarter 1974 peak.

As this review has indicated, profits in the fourth quarter of 1975 were substantially above their low in the first quarter. The increase of profits before taxes in the fourth quarter was at an annual rate of nearly 14 percent—a significant pace. In light of the strong sales advances of the past two months and the possibility of further productivity gains, prospects are bright for continued growth of profits in 1976.

Corporate Profits, 1973-75

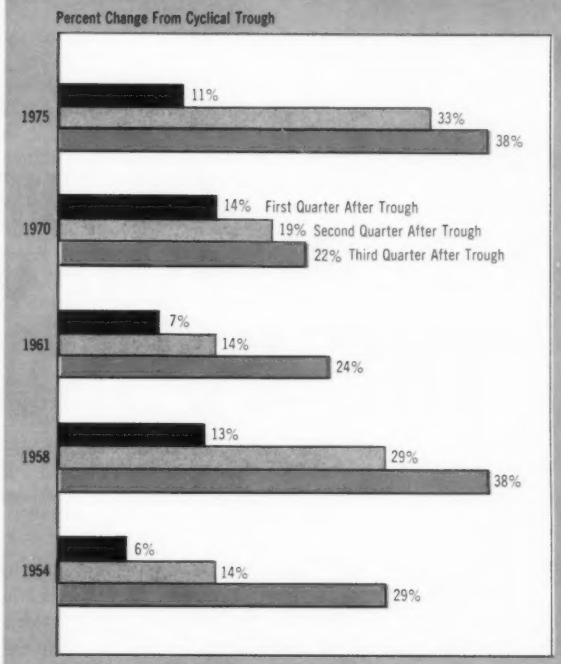
1



[1] Operating profits, consisting of profits before taxes and Inventory Valuation Adjustment.

Profit Recovery in Five Expansions*

2

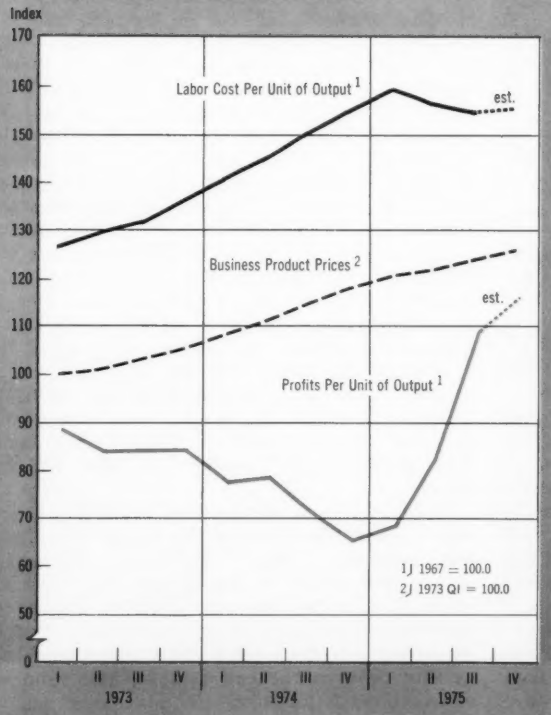


NOTE: Trough quarters are taken at 1975 QI, 1970 QIV, 1961 QI, 1958 QII, 1954 QII.

* Profits are before taxes, seasonally adjusted in current dollars.

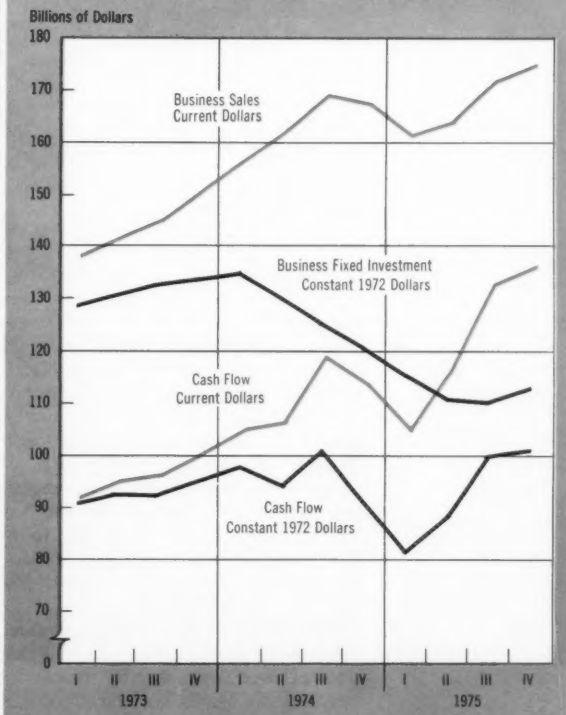
Profits, Prices and Labor Costs 1973-75

3



Sales, Cash Flow, and Fixed Investment, 1973-75

4



THE CURRENT STATE OF THE ECONOMY

The following article concerns the present state of the American economy and the challenges ahead as seen by Secretary of Commerce Elliot L. Richardson.

Since President Ford delivered his economic report January 26, the performance of the nation's economy has been better than expected. The consumer sector is providing the major stimulus and recent evidence indicates that it will continue to set the pace of the recovery in the immediate future.

Growth in real GNP during the first quarter appears to have accelerated from the fourth quarter rate, and the Administration's forecast for 1976 seems to be on track. Progress towards reducing unemployment and expanding job opportunities has been encouraging—better than many economists were forecasting late last year. In addition, the magnitude of the slowdown in inflation has surprised many analysts. One important result of the slower rise in prices is that recent increases in personal income translate into solid gains in real purchasing power. The stock market has tended to react favorably to these developments, in turn bolstering consumer confidence and consumer spending.

The welcome economic news, of course, does not mean that all our problems have been resolved. My intent here is to describe the current state of our economy—the strong as well as the soft spots—and to outline the challenges ahead.

Recent economic developments should be evaluated in long-term perspective. Although the recovery has been under way for a full year, some key economic measures have not yet returned to their pre-recession levels—a reflection of the severity of the recession. Real GNP, the most comprehensive measure of economic activity, has not yet fully recouped the loss sustained during the recession. From late 1973 to early 1975, real GNP declined by 6.6 percent, twice the magnitude of the loss during the worst previous postwar recession of 1957-1958.

The nation's total output began to recover in the second quarter of 1975, and as of the fourth quarter was still slightly below the record high reached two years earlier. Real GNP would have to grow at about an 8.5 percent annual rate in the first quarter to reattain the previous peak. It is unlikely that output increased that rapidly in the first quarter, and therefore it will be the second quarter before the previous peak is reattained and surpassed.

Some economic sectors provided stimulus to real growth in the first quarter, while other sectors temporarily retarded growth. On balance, the evidence indicates that the economy's real growth rate in the first quarter will exceed the 5.0 percent gain of the fourth quarter.

A sharp deceleration in the liquidation of business inventories accounted for a major share of the gain in the early stages of recovery last year. It seems appropriate, however, to depict the consumer as the star of this economic recovery. After a slight pause during the fall, the year 1975 ended with a surge in consumer spending, probably stronger than was generally anticipated by retailers.

Strength in the consumer sector is continuing into 1976. Data on retail sales and prices for January and February imply that growth in real outlays by consumers accelerated in the first quarter. This should more than offset the retarding influences on the nation's growth rate from other sectors. The January-February level of retail sales, in current dollars, was up 12 percent from the level in the corresponding period of 1975—a little above retailers' sales expectations. In a recent survey conducted by the Commerce Department, retailers reported that they expect their sales to rise by 9 percent this year.

Much of the strength in retail sales is in purchases of durable goods, such as autos and appliances, which require increased use of installment credit. These commitments on the part of consumers indicate an improvement in public attitudes with regard to future economic conditions. Consumer confidence, which was severely shaken during the recession, has been recovering as a result of the slowdown in inflation, the rise in employment, the reduction in layoffs and unemployment, and the improvement in the stock market. Surveys conducted by the Conference Board and the University of Michigan showed significant gains in consumer attitudes in the first quarter. Over the past year or so, practically all of the decline in consumer confidence and consumer sentiment that was sustained during 1973 and 1974 has been recouped. Consumers have been saving a large share of their disposable income and have been rebuilding their liquidity positions. These factors augur well for continued strength in the consumer sector.

Signs are accumulating that the liquidation of excess inventories has run its course. The inventory problem, of course, was caused by the unanticipated decline in demand in late 1974 and early 1975. A key measure used to evaluate the inventory situation is the ratio of total business inventories to final sales. That ratio reached a cyclical peak at the end of 1974. The ratio was unusually high by historical standards, particularly in manufacturing, and indicated that liquida-

tion of inventories was in order during 1975.

In durable goods manufacturing, the liquidation continued into the early months of 1976, but nondurable goods producers began accumulating stocks late in 1975. Manufacturers are beginning to rebuild inventories of materials and supplies; renewed inventory building of finished goods and work-in-process has not begun in earnest. The caution shown by careful managerial control over inventories may have stemmed from manufacturers' uncertainties about the strength of the recovery a few months ago.

Strong sales in December resulted in a sharp reduction of inventories among wholesalers and retailers. This set the stage for a resumption of inventory accumulation and both retailers and wholesalers started to rebuild depleted stocks in January.

The ratio of business inventories to final sales is currently back to pre-recession levels. When complete data for the first quarter are available, they will probably show a net increase in business inventories. As final sales continue to rise, inventory accumulation should gain momentum during the remainder of the year. This will stimulate employment and output.

After three consecutive monthly declines, housing starts rebounded sharply in February—to the highest level since early 1974. Residential construction in the GNP accounts reflects housing starts with a lag because of the difference in timing of starts and payments. Therefore, the declines in starts from October to January may cause real outlays for residential construction to rise less during the first quarter than in the fourth quarter.

The recent strength in housing starts continues to be concentrated in single-family units rather than apartments. Multifamily starts have declined since last November, after a moderate gain earlier in the year. The trend in multi-family housing permits does not offer much encouragement for an early rebound. In addition to low rents, rising costs, and generally inadequate rates of return, the troubles of multifamily homebuilders reflect the continuing problems of real estate investment trusts, a principal source of financing.

Meanwhile, the supply-demand relationships in apartments are slowly improving. Completions of apartments have fallen steeply for about two years, and are still declining. Vacancy rates in larger buildings are about one-fourth below their peaks in 1974 for both condominiums and rental units, but are still high, at least for condominiums. It may be that higher rents and lower interest rates are needed to trigger a revival in apartment building. Median rents on new apartments began to rise strongly in mid-1975, after nearly three years without much change.

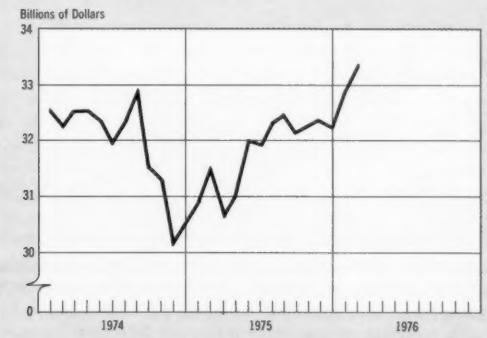
Conditions are favorable for continued improvement in single-family housing starts. Savings inflows at thrift institutions have been excellent, funds for mortgages have become more abundant, and mortgage interest rates have edged down. It is important to the housing sector that we continue to resist policies that will aggravate inflation. Rapidly rising prices would cause higher interest rates, which in turn would jeopardize the flow of savings that provides financing for new housing.

Capital spending has been slow to respond to the economic upturn, but fundamental conditions for a decisive upswing later this year are improving. Corporate cash flow—depreciation and retained earnings—registered a significant improvement during the last three quarters of 1975. This will enable corporations to finance their investment programs in 1976 largely from internal sources of funds. New capital appropriations by manufacturers rebounded in the fourth quarter, a sign of improved business confidence and an indication that actual spending should strengthen in the near term. The backlog of capital appropriations at the end of 1975 also rose for the first time in more than a year. January and February data on contracts and orders for plant and equipment also indicate a pickup ahead in capital spending. Finally, sales gains that are above the expectations of business executives appear likely to induce an upward revision in capital spending plans. Many analysts believe that will be the case in 1976.

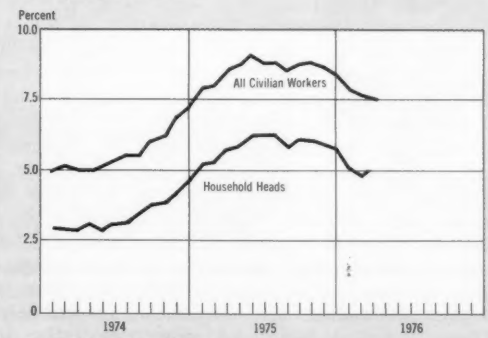
The foreign trade sector probably was a negative influence on the nation's real growth rate

Signs are accumulating that the liquidation of excess inventories has run its course.

Retail Sales (1967 $)



Unemployment Rates



SOURCE: U.S. Department of Labor.

in the past quarter. January and February data on merchandise exports and imports indicate that the net exports component of GNP declined somewhat in the first quarter. The smaller surplus on goods and services reflects a moderation in exports coupled with a higher level of imports of consumer and industrial goods. A large part of the recent increase in imports was due to a rise in petroleum imports following the removal in December of the tariff on crude petroleum.

Conditions are favorable for continued improvement in single-family housing starts.

For the year as a whole, prospects are that the trade balance will show a surplus well below the record high of 1975. In large measure, this is a consequence of the fact that economic recovery began earlier and is proceeding at a faster rate in the United States than abroad. The difference in recovery rates is stimulating growth in our imports more vigorously than exports—a development that may be reinforced by the recent appreciation of the dollar in relation to certain major foreign currencies such as the British pound, the French franc, and the Italian lira.

Recent developments in employment and unemployment have been encouraging. Jobs have expanded significantly—by 2.6 million from the recession low of March 1975 to March 1976. In the first three months of 1976, the employment gain was 1.3 million. As of February, total civilian employment had fully recovered to the previous high of mid-1974—and in March, employment rose to a new high. Progress in reducing unemployment has been very good. From a postwar high of 8.9 percent in May 1975, the unemployment rate eased to 8.3 percent by December. Further declines in January, February, and March brought the unemployment rate to 7.5 percent. Although this is still an unacceptable high rate, it does suggest that the Council of Economic Advisers' projection in January—calling for an average unemployment rate of 7.7 percent during 1976—may be too conservative. The unemployment rate for heads of households, who are the nation's primary breadwinners, is down to 5.0 percent compared with a peak of 6.1 percent at the end of the recession.

Full attainment of our long-run economic goals obviously will require perseverance and time.

Recent price behavior also has been encouraging. On balance, the Wholesale Price Index showed virtually no change between October and March, largely reflecting five consecutive monthly declines in prices of farm and food products. In addition, prices of industrial commodities have risen at a slower rate.The subsiding of wholesale prices has tempered the rise in the cost of living. During the twelve months ending in December 1975, the Consumer Price Index rose by 7 percent, which represented a marked improvement for the double-digit inflation of the previous year. The rise in consumer prices slowed further in January and February of this year—to an annual rate of about 3 percent.

Much of the recent slowdown in consumer prices was due to declines in food and gasoline. Currently, the major problem area is services, where price increases have been unusually large and pervasive. Further progress in reducing the rate of inflation may be difficult if prices of services continue to rise rapidly. Moreover, prices of food and gasoline will not decline indefinitely. Thus, we might experience some acceleration in the rate of inflation by early summer, particularly if farm prices begin to strengthen as a result of unfavorable weather conditions. Price performance over the year is expected to show a modest improvement relative to 1975.

With economic recovery firmly under way, the major concerns of policymakers center on inflation and unemployment. Our success in sustaining the expansion depends critically on the ability to keep inflation under control. To this end, it is essential that policies be carefully evaluated to ensure consistency with our long-run goals of achieving a relatively stable price level and economic growth with full employment. This means that we must have responsible policies not only by the monetary and fiscal authorities, but also by businesses and labor organizations in their price and wage decisionmaking processes.

Full attainment of our long-run economic goals obviously will require perseverance and time—perhaps the rest of this decade. A fundamental issue at this juncture concerns the degree to which we should rely on the public versus the private sector to move the economy toward its goals. At present, Congress is considering tax and expenditure measures that will influence the nation's economic future.

Most provisions of the Tax Reduction Act of 1975 have been extended to mid-1976. President Ford proposed a continuation of the tax reductions after July 1, 1976, and called for an additional tax cut of $10 billion—on condition that growth in federal expenditures for fiscal 1977 be curtailed. Fiscal stimulus would begin to diminish during the latter half of this year, when the potential for a reacceleration of inflation will increase.

Certainly there are those who would opt for greater fiscal stimulus to drive the economy at a faster pace—in an attempt to restore full employment within a short time. Excessive expansion, however, entails the risk of another severe round of inflation followed by recession. The President's proposed move toward budgetary restraint is designed to avoid a repetition of these events and to promote conditions under which the private sector of our economy will prosper.

One of the most important long-run economic challenges will be to accelerate the rate of private capital formation. Our nation's investment needs will be relatively larger than in the past. According to a recent study by Commerce's Bureau of Economic Analysis, the private investment share of GNP must rise by several percentage points in the years ahead if we are to return to full employment by 1980 and make progress toward achieving our goals of self-sufficiency in energy and a cleaner environment. Accordingly, proposals for a comprehensive reform of our tax laws to promote increased saving and private investment deserve careful consideration. As I have emphasized on other occasions, business firms must have adequate incentives to invest—and the underlying incentive is profits. It follows that any policy which would dampen profits would also discourage business expansion and the creation of jobs.

The challenges facing our nation are real. Problems will not simply vanish without concrete action. Although considerable progress has been made in restoring the health of our economy, much remains to be accomplished. I believe we are moving in the right direction.

'EARLY WARNING'

ON COMMODITY SHORTAGES TO AID POLICY MAKERS

Triggered by the recent "shortage of the week," when a new industrial raw material seemed to be in short supply each week, Commerce is developing a formal Early Warning System for forecasting commodity supply problems.

The system will attempt to spot developing supply problems in industrial commodities, and alert government policymakers so they can take appropriate corrective action that might help prevent any jolts to the economy.

Once fully operational, the system will receive input from throughout the government and industrial community, feed it into a computer with a highly developed economic forecasting capability, and issue prompt warnings whenever a certain commodity shows signs of scarcity.

The Office of Business Research and Analysis (OBRA) in the Bureau of Domestic Commerce was singled out for the task of creating and administering the system, mostly because that's the kind of work it's been doing all along.

OBRA for a number of years has had the primary responsibility within the government for predicting and analyzing supply problems in a broad range of industrial commodities, from raw materials to finished products. For several years, the number of items causing supply problems historically was relatively small and analysis and forecasting activities were handled as ongoing functions of OBRA's industry analysts.

However, the 1973-74 period of heated demand and inflation resulted in short supply problems in more than 30-40 basic industrial commodities and materials, many of which included complex manufacturing processes and products. These supply problems caused further dislocations of many other finished and semi-finished products.

In addition, Commerce's authority for export administration was further defined by the 1974 amendments to the Export Administration Act, which expanded its responsibilities to require monitoring and reporting on items not only already experiencing short supply problems, but also those which are expected to experience short supply problems or those which many contribute to inflationary conditions in the domestic economy.

Thus, it was clearly the Congress's intent that Commerce predict supply dislocations before the fact, rather than waiting until after they occurred.

The problem of sheer numbers, the more stringent requirements of the Export Administration Act, the increasing complexity of supply-related problems and issues, and the growing demand for accurate data in making policy decisions by such federal agencies as the Department of Defense, all pointed to the obvious need for a system of forecasting supply problems.

OBRA is uniquely qualified to develop the system primarily because of its 140 industry analysts and specialists, who maintain up-to-date coverage of some 325 manufacturing industries and 222 service industries, providing analytical support and assistance for policy makers within the Department and, indeed, throughout the government on issues affecting these industries and the economy as a whole.

BDC's three other offices are also equipped to play active roles in the system:

The Office of Industrial Mobilization, which has responsibility for stockpile activities, administration of the Defense Priorities System and Defense Materials System, the Industrial Evaluation Board which conducts capacity surveys, and the National Defense Executive Reserve;

The Office of Business and Legislative Issues, which conducts analyses on the economic impact of environmental requirements and which maintains a high-powered quantitative analysis group; and

STUDYING SUPPLY LEVELS—*Commerce Department specialists will be keeping their eyes on supplies of industrial commodities throughout the economy, in an attempt to help federal policymakers initiate action to head off disruptions.*

REUSE—*Increased incentives for recycling are one possible policy alternative to help prevent supply problems.*

The Office of the Ombudsman for Business, provides an early alert system of its own in the form of inquiries it receives on supply problems from the Congress, the public, and Commerce offices around the country.

The system has three basic objectives:

▸ To predict both near-term and long-term potential aberrations in supply (near-term is defined as 6 to 18 months and long-term as 5 years). Development of an effective near-term forecasting capability for the system has the most immediate priority. Such forecasting is expected to be largely demand-oriented, with predictive capability heavily dependent on cyclical changes in economic activity. Inventories and inventory changes will be a major consideration, as will expectations for "user" industries, and analysis of key industrial indicators for their impact upon individual commodity demand.

▸ To analyze the potential impact of anticipated supply problems upon other parts of the economy and the economy as a whole; and,

▸ To develop policy options that might help prevent a potential problem or correct an existing one.

The third objective—policy formulation—will obviously be the most difficult. After determining the existence of a potential problem, just what can the Federal Government do about it? The purpose of the Early Warning System definitely is not to control the economy or to implement economic planning. But there is some authority available for federal action which might help head off problem areas, such as:

—export administration;

—flexible government procurement policies;

—Defense Production Act assistance to resolve longer-run capacity problems;

—recycling incentives;

—relaxation of regulations that might adversely hit capacity (environmental, occupational, health and safety, land use); and even,

—substitution and conservation programs.

How will the system work? Basically, OBRA's approach involves developing forecasts of economic and industrial activity; feeding in a broad range of key industrial indicators impacting on specific commodities or industries; and then forecasting shipments of user industries to determine the impact of these forecasts upon individual commodities, materials, and products.

The system is basically an interacting one, with the interaction occurring in a number of ways:

—An ongoing interaction between OBRA's industry analysts and its computer modeling and data-banking capabilities.

—Interaction among the OBRA analysts themselves to pinpoint the effects of trends and anticipated developments in one industry upon another. For example, trends and developments in the equipment area are likely to impact upon materials and fabricated metal products, such as castings and forgings, which in turn are required for applications in construction. We can thus attempt to determine the direct effects on the basis of inter-industry relationships, but also the competition for commodities and products.

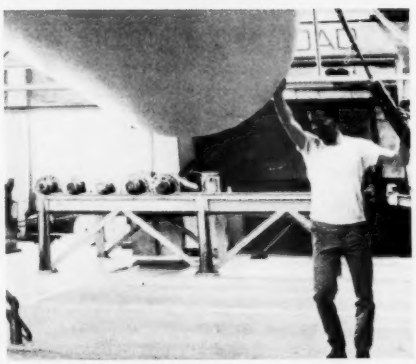
—Interaction with other agencies within the Federal Government—such as the Defense Department, Interior, ERDA, FEA, the Council of Economic Advisors—which can provide vital input to the system and which hopefully will become its biggest customers.

—Interaction with industry. The groundwork has already been laid to provide liaison with industry advisers, the Commerce Field Service, and such organizations as the National Association of Purchasing Management, the American Defense Preparedness Association, the American Society for Metals, and other key trade and professional associations into the operations of the system.

During the development stage, the system will maintain surveillance over a selected number of commodities which have a past history of supply problems. This "pilot" list of commodities will be sufficiently large and broad so as to assure necessary formalized, ongoing vigilance while the total project is being built.

Initially, the system will not attempt to analyze supplies of fuel, textiles, or agricultural commodities, except as they impact on other products.

Information will be collected from a variety of sources, ranging from trade press articles and industry contacts to leading indicators of industrial activity. Plant closings, impending labor deadlines, shifts in inventories (at all stages), trade data, and regulations of the Environmental Protection Agency and the Occupational Safety and Health Administration affecting capacity would all be obvious sources.



DOWN THE LINE—*Early warnings that help avoid commodity supply problems will also prevent dislocations among industries further downstream manufacturing many other products.*

Other Commerce agencies which are also expected to provide useful data include: Bureau of Economic Analysis (industrial and economic indicators), Office of Industrial Mobilization, and the Census Bureau. Department of Defense, Department of the Interior, Federal Reserve Board, Bureau of Labor Statistics, Energy Research and Development Administration, Federal Energy Administration (anticipated requirements of the energy program), and Department of Transportation (requirements of rail expansion and revitalization) could furnish data not available within Commerce.

The output of the Early Warning System is expected to be quarterly reports which anticipate potential problem areas, attempt to identify the nature of the potential dislocation, analyze the potential impact, and recommend policies which might be useful in easing anticipated problems. The reports will be concise and suitable for use by policymakers in the government.

OBRA is also devising a complex structure to cope with the inter-relationships of commodities and industries, as a means of understanding the effects of changes in one sector upon another. Unlike input-output, it is attempting to take into consideration the major intermediate stages of process and production in the key sectors, thus enabling analysis of bottlenecks caused by changes either in supply or demand.

This entails a massive modeling and data banking job, which is being tackled by OBRA's Economic Studies Staff.

James M. Owens, director of OBRA's Materials Division, injects a note of caution:

"No equation, or set of equations, no matter how complex, can come up with a 'bottom line' that reveals a shortage and quantifies it to the last pound. We are developing a system that will provide a sophisticated alert mechansism to anticipate potential problem areas, identifying them for further and more in-depth analysis.

"Also we do not believe that any model, or combination of models, can provide the complete, true picture in simple terms for supply/demand analysis. That is why the system is totally dependent upon the knowledge and expertise of our industry analysts, but utilizing computer modeling and data manipulation as tools."

The system is expected to be used for analysis in support of Federal policy formulation, and at present it is not anticipated that the forecasts will be disseminated outside of government.

American Life, Economy Since Colonial Times Is Detailed In Census Statistical Volume

Today, Americans expect that the census will be taken every ten years. But in 1790, the year of the United States' first national census, they probably didn't realize that the information the census taker collected would be part of a valuable reference work almost 200 years later. These data, plus material from other sources, are among the mass of statistics that appear in the new Bicentennial edition of *Historical Statistics of the United States, Colonial Times to 1970*, just issued by Commerce's Bureau of the Census. The publication details the social and economic development of America in quantitative terms from the time the colonies were established in the early 1600s up to 1970.

The first copy of this book was presented by Commerce Secretary Elliot L. Richardson to Dr. Daniel J. Boorstin, Librarian of Congress.

Examples of material appearing in the new book include:

- The estimated population of each of the colonies from 1630, at 10-year intervals;
- The slave trade at various ports of entry from the start of the 18th century;
- Basic weekly diets in Britain and America from 1622 to 1790 including estimated caloric intake of various classes of people in that period;
- The value of exports to and imports from England by the American colonies and states, 1697 to 1791.

The Bicentennial edition is the third in a series and is a much expanded version of its predecessors, which brought the statistics forward to 1945 and 1957, respectively. It supplements the annual *Statistical Abstract of the United States*.

The new edition is in two volumes and contains 1,298 pages of tables and associated text annotations. It contains more than 12,500 statistical time series (sets of data collected at regular intervals to measure some activity.) This is a 50 percent increase over the previous edition.

New series provide more information on economic growth rates, national and personal income, valuation of capital stocks, social insurance and welfare, education, and crime and correction.

As in preparing previous editions, Census Bureau personnel worked closely with consultants versed in the various fields, using material supplied by numerous scholars, research analysts and subject-matter specialists. Contributors are listed in detail.

Subjects covered are: population; vital statistics and health and medical care; migration; labor; prices and price indexes; national income and wealth; consumer income and expenditures; social statistics; land, water and climate; agriculture; forestry and fisheries; minerals; construction and housing; manufactures; transportation; communications; energy; distribution and services; international transactions and foreign commerce; business enterprise; productivity and technological development; financial markets and institutions; and government.

International trade covered

The chapter on international transactions and foreign aid includes: balance of international payments since 1790; international investment position of the United States; value of direct investment in foreign countries, by area and industry groups; value of foreign direct investment in the United States by area and industry; and U.S. government foreign grants and credits, by country

The foreign commerce section covers: merchandise, gold and silver exports and imports; foreign trade related to various measures of production; value of merchandise imports and duties; value of merchandise exports and imports, by economic class; indexes of quantity and unit value of exports and imports, by economic class, by broad end-use class, and by groups of customs districts; value of exports (including re-exports) of U.S. merchandise by country of destination and of general imports by country of origin; and tables of exports and imports of selected products such as cotton, tobacco, wheat, coffee, tea, sugar, crude rubber and raw silk.

Business enterprise covers proprietor-

The Census taker's visit was often a major social occasion.

An industry whose time has gone—none too soon for the whale.

Turn-of-the-century street scene—the beginnings of horseless transport.

From generation to generation — most education used to be in the home.

Individual artisans were the backbone of the nation's early industry.

ships, partnerships and corporations—number, receipts and profit; number of firms in operation, by major industry group; recorded mergers in manufacturing and mining; percent of total corporate net income reported by small and large corporations; and manufacturing and trade—sales and inventories.

Also, corporate asset, liability, income, deduction, tax and profit items and dividends paid, for all industries; nonfinancial corporations, gross product and unit costs; business expenditures for new plant and equipment; and assets, liabilities and selected income items for electric, utility, telephone and telegraph companies.

The book provides a convenient reference source that serves two purposes—collecting and referring. The collecting function consists of assembling, selecting and arranging data from hundreds of sources. The referring function consists of numerous annotations to the data which are a guide to sources of greater detail.

For the first time, several chapters include a number of data series broken down below the national level. In all, there are 13 new tables in this category, nine of which present data for the individual states and four for either regions or smaller geographical divisions.

In general, only annual or census-period data which cover at least 20 years are presented. A major exception was made for series covering the colonial or pre-Federal period. Lapsed series were included, particularly those falling within the nineteenth century or extending into the early twentieth century. The lapsed series, which begin and terminate in the past, represent major fields of interest during various phases of American historical development; frequently they must be sought in out-of-print

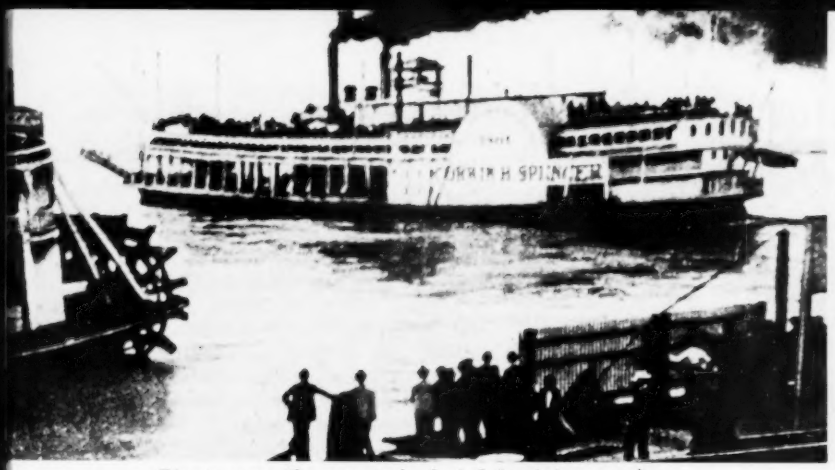
History Repeats Itself

Way back in 1870, the U.S. Census Bureau was already using nonsexist terminology. Job titles of occupations filled by women included "fishers, hunters and trappers" and "repairers" along with "boat hands," "oil refinery operatives" and "gas-works employees."

In 1870, only 13 percent of the total female population—age 10 and over—indicated they had an occupation. By contrast, the 1970 Census of Population showed that 39 percent of the U.S. female population—age 14 and over—indicated an occupation. Nearly half of the employed females were domestic servants in 1870, and a fifth worked on farms. By 1970, the number of women engaged as private household workers had dwindled to only 3.6 percent of the female force.

"Aside from the fact women are no longer employed in some of the 1870 occupations," according to Data User Services Division Historian Frederick Bohme, "a curious thing happened to many of the job titles since that census. Not one of those used for women in the 1870 census contained the ending 'man.' Yet by 1970 there were fishermen, firemen and repairmen to name but a few.

"Happily, the awful alternative of 'person' has been avoided by harking back to 1870. In 1973, the Office of Management and Budget issued a number of revisions, and 'fishers' and 'repairers' were among the titles that reappeared."



Rivers were the country's first Interstates, serving as its commercial lifeblood.

Be it ever so humble, our ancestors were grateful for such accommodations.

documents available in few libraries.

The new book is not a mere reprint of data that appeared in the previous *Historical Statistics*. As well as new series included for the first time, there are revisions and corrections of the data based on access to more accurate information.

In addition to censuses, historical statistics come from annual reports of the executive heads of Federal Government agencies, reports of special federal commissions, printed debates of Congress, published reports of committees of Congress and transcripts of hearings on important legislative measures, published reports and documents of state governments, and statistical publications of private research organizations, colleges and others.

As stated in the introduction of *Historical Statistics*, "Statistics are a valuable adjunct to historical analysis. They often clarify and enrich qualitative history and on occasion become important parts of a historical record on their own.

"However, users of historical data are faced with the paradox of over-abundance and scarcity. A burdensome multiplicity of sources has frequently to be consulted in order to reconstruct one quantitative aspect of a particular subject. Just as often, users are confronted by a discouraging barrenness of data, discoverable only after much costly work and delay.

"Impediments to the use of historical statistics, then, include the initial difficulty of determining whether the data in fact exist, of identifying the document in which the data may be found, of constructing time series where the data may not be arranged in suitable form, and of identifying and interpreting changes in concept and coverage."

Historical Statistics saves the searcher much of this work.

(Whaling and Cyrus McCormick pictures courtesy John Hancock Mutual Life Insurance Co.)

Peaceful revolution: Cyrus McCormick invents the reaper.

Clipper ships dominated the world's trade routes before the Civil War.

Private Interests Still Must Lead Metric Effort, Despite New Law

Signing of the Metric Conversion Act into law last December did not mean that the government was assuming leadership of the nation's metrication effort. In this recent talk, Commerce Secretary Richardson reminded the American National Metric Council that the initiative for determining how the changeover is brought about still rests with the private sector.

There are two major reasons why the United States has now reached metric maturity. In the first place we were becoming increasingly isolated from our major trading partners. In those heady days following World War II we paid little attention as other industrialized countries began adopting the metric system. We were the strongest industrialized nation in the world. We could, and perhaps did, ignore the whole thing. Not until the United Kingdom announced its intention to place its economy on metric in 1965, did we truly realize the significance of what was taking place. As the Commonwealth countries followed Great Britain's lead we saw support for the Customary Measurement System dwindle. In the end, Brunei, Burma, Liberia, Yemen — and the United States — remained the only nonmetric countries in the world.

A second, interrelated factor is the rise of large multinational corporations. As these companies aggressively sought and won overseas markets, they became aware of the liability that the U.S.'s antiquated measurement system imposed on them. They had to dual-dimension their products, create separate production capabilities to turn out metric products for export, or abandon Customary design altogether to produce products in metric dimensions.

This country is now at a crucial stage in its world trade activities. In 1974 our exports totaled almost 7 percent of the gross national product, or $98 billion. It was the first time since World War II that American exports exceeded 5 percent of GNP. This trend continued last year, when exports flowed at 6.8 percent of the GNP, or $107 billion. The favorable U.S. balance of trade last year—$11 billion—had a significant impact on a recession—wracked economy. In the first quarter of 1975, when the recession was at its worst, there was a $2.1 billion surplus in our balance of payments. This helped to pull the nation out of the first-quarter trough and into the recovery of the final three quarters.

It is obvious, therefore, that to help ensure more jobs at home this country must sell more goods overseas. In this vital effort we cannot let an antiquated measurement system become a barrier to export expansion.

And there is increasing evidence that the Customary measurement system *is* a barrier to trade flows. The European Economic Community has decided to make metric the common trading language among its nine member nations by 1978, less than two years hence. Dual dimensioning of imports will be allowed only if determined not to be confusing—with each nation to judge compliance separately. This action could potentially bar some American goods from these countries.

We expect a sharp increase in legal restrictions against importation of nonmetric products by other metric countries in the next few years.

The signing of the Metric Conversion Act by President Ford last December should have a salutary effect, promoting metric awareness and metric changeover within our industrial and commercial sectors. This, of course, should in turn have a favorable impact on American business transactions abroad.

International role

The United States also needs to play a strong role in developing international standards that are compatible with U.S. industrial technology. The President's Export Council, in its status report on industrial changeover to the metric system last September, called this the "critical item" on the U.S. changeover list. "Changeover to a world of metric standards that are not compatible with U.S. industrial technology would be a tragedy," the Council observed.

Increased participation by representatives of U.S. industry on international standards bodies such as the International Organization for Standardization and the International Electrotechnical Commission are a means of assuring this compatibility.

There are numerous advantages for the U.S. industries that cooperate in the switch to metric. In addition to the opening of new markets, benefits can be realized in reduced inventories. Manufacturers will not have to keep on hand as many product lines to correspond with various size requirements.

During the metric changeover in the United Kingdom, for example, steel inventory was reduced 10 percent, belts and pulleys inventory was cut 30 percent, and concrete pipe inventory was also reduced 30 percent.

It is essential that the private sector initiate and implement this nation's voluntary changeover to the metric system. There may be some misconception that the passage of the Metric Conversion Act has relieved businessmen, industrialists, educators and others from primary responsibility. This, I believe, is wrong and runs contrary to the intentions of both the Administration and the Congress. The U.S. Metric Board is to be appointed by President Ford. Its duties will be to channel and coordinate those private efforts already under way—and to encourage the expansion of those efforts wherever possible.

The U.S. Metric Board will serve as a facilitator, but will not be the initiator—the initiative for metric conversion will still come from the private sector.

Although Great Britain has not fully implemented the ten-year metrication plan begun in 1965, it has made great strides, particularly in cooperation with its business and industrial sectors. Such industries as metals, chemicals, pharmaceuticals, paper plastics and building materials have virtually achieved the switch to metric. Many consumer items are now available in metric sizes, such as cooking oil, beer and soft drinks, beds, paints, carpeting, and bleach. Many other goods, including packaged foods and clothing, are dual-labeled.

Then there are the metrication activities of the largest Commonwealth country and our best trading partner—Canada. The Canadian Metric Commission, formed in 1971, has 11 Steering Committees which, in turn, coordinate 60 Sector Committees responsible for particular industries. This public-private sector cooperation has worked especially well and more than 1,000 representatives from all sectors of the Canadian economy participate in the deliberations.

In considering these and other conversion efforts, it is clear that there is a need to keep the general public informed of what is taking place. The Metric Board will, hopefully, have many committees representing all of the economy's sectors. But if it does not have the understanding and support of the people, it will encounter serious obstacles on the road to metrication.

The fact is that we must *all* become messengers of metrication. If we only view the metric changeover through the focus of our particular specialty, be it business, industry, labor or the consumer, then we shall have failed. In all of our dealings we must be aware of the public ramifications — and the opportunities these present to enlighten the minds of our people.

For us, it is easy to rationalize the need for metric. For the coal miner, insurance clerk, steam fitter or accountant this need may not be as readily apparent. "Why should *I* go metric . . . what's in

it for *me?*" will be heard with increasing frequency as the metric movement grows. It will be the duty of all of us to act as public advocates for the move to metric.

For my part, I pledge the full resources of the Department of Commerce to assist in this important endeavor wherever possible. The National Bureau of Standards, for example, as you know, has a number of resources available. For example, it recently inaugurated a national speakers bureau designed to develop public support and confidence in the metric system. More than 200 metric experts in every state have agreed to participate. The speakers bureau is off to a good start with over 750 requests for speakers in the first three months.

With the acceptance and support of our citizens we can meet the goal of increasing exports and improving efficiency through international standardization. As we expand our overseas markets we will also score notable gains at home in terms of jobs and productivity.

In these and other ways, the message will become increasingly obvious in the months and years ahead: Metric is good for America . . . and for Americans.

Guide To Tourism Information Issued By Commerce Agency

A new publication of Commerce's United States Travel Service, *Traveler's Guide To Information Sources*, will assist foreign visitors to the United States with problems they may encounter.

Included in the guide is such information as state and city tourism office addresses and telephone numbers; foreign currency exchange facilities; location of state welcome centers on major highways; addresses of the nine regional offices of the National Park Service and a map of the National Park System; locations of airports with multilingual gateway receptionists; and additional information of help to foreign visitors.

Publication of the guide was timed to coincide with the Bicentennial Year, when greater numbers of international visitors to the United States are expected than ever before.

Copies of the *Traveler's Guide* are being distributed to USTS Field Offices and Travel Planning Centers—especially selected retail travel agencies—in Canada, Mexico, the United Kingdom, France, Germany and Japan. Copies have also been distributed to United States Information Agency libraries abroad and to U.S. Department of State Commercial Officers abroad.

Within the United States, the guide will be made available to state and city tourism offices, travel industry associations and public service organizations, selected libraries, and Commerce District Offices.

Nominations Sought For Members Of U.S. Metric Conversion Board

The nominating process has begun!

Secretary of Commerce Elliot L. Richardson has asked industry, labor, science, education, and several trade sectors to nominate members for the United States Metric Board created by the Metric Conversion Act of 1975.

President Ford has assigned responsibility to the Department of Commerce for compiling lists of names from the 12 sectors of society identified under the law as having special interest in America's conversion to the metric system. Letters to organizations cited by the legislation will be mailed shortly.

President Ford signed Public Law 94-168, "Metric Conversion Act of 1975," on December 23, 1975. The Act provides for the establishment of a 17-member Board to coordinate the voluntary conversion to the metric system.

Twelve of the 17 members of this Board are to be appointed by the President with the advice and consent of the Senate from lists of names recommended by organizations or individuals representing certain interests specified by the Metric Conversion Act. The President will also nominate a Chairman and four at-large members.

The categories from which the President will make his selection are:

One each from lists of qualified engineers, scientists, educators, and construction industry representatives:

One each from lists submitted by the National Association of Manufacturers, the Chamber of Commerce of the United States, organizations representing state and local governments, and the National Conference on Weights and Measures.

Two each from lists prepared by small business organizations and labor organizations.

Any individual or organization falling within one of the above categories is entitled to recommend a nominee for appointment to the United States Metric Board. Such nominations should specifically state the category represented in making the nomination, and include a brief biographical sketch of the nominee.

All nominations should be submitted through Dr. Betsy Ancker-Johnson, Assistant Secretary for Science and Technology, U.S. Department of Commerce, Washington, D.C. 20230.

Closing date for receiving nominations is June 30.

Book Outlines Successful Metric Teaching Methods

Firms whose employees are having a hard time adjusting to the metric system of measurement could profit from a new publication by Commerce's National Bureau of Standards.

Successful Experiences in Teaching Metric offers the experiences of 17 teachers and administrators who successfully introduced metric into their school systems. The 106-page publication covers use of metric in science and mathematics education, libraries, sports and physical education, metric education workshops, audio-visual aides, and benefits gained from earlier British and Australian experience in making the switch.

Copies of NBS Special Publication 441 may be ordered for $2.30 by SD Catalog No. C13.10:441 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Listing Helps Visitors Pre-Select Lodgings With Language Skills

Foreign visitors can now find out in advance what U.S. hostels have personnel who speak their language.

More than 5,000 American hotels, motels, resorts and restaurants have been awarded individual certificates by Commerce's United States Travel Service commending their foreign language services for international visitors.

The certificates, which USTS requests be prominently displayed, read: "The United States Department of Commerce commends this establishment and its staff in recognition of the foreign language spoken to assist visitors from abroad." The accommodations are cited for providing full-time reception or managerial personnel who speak French, Spanish, Japanese, German or Italian.

Establishments receiving the certificates will be listed in the *1976 Mobil Travel Guides*, with an appropriate language code. This service will enable the majority of non-English-speaking potential visitors to select accommodations which best serve their language needs.

Through listing these establishments in the travel guides, USTS hopes to actively encourage foreign travel agents and wholesalers to use the foreign language listings to promote those lodging properties that can best serve the needs of their customers.

Recent NTIS Publications

These recent reports of government-conducted or government-sponsored research of possible interest to U.S. businessmen are available from the National Technical Information Service. Prices listed are for paper copies; second prices, where listed, are for microfiche. All others are available in microfiche for $2.25. Order from NTIS, Springfield, Va. 22161 (703-321-8543).

Report on the Federal research and development program, fiscal year 1976 (PB-239 528/CZ). Federal Council for Science and Technology, Washington. 171 pp. $6.25.

Contribution toward identifying the developing executive (AD-005 866/CZ). Naval Postgraduate School, Monterey. 64pp. $4.25.

Environmental pollution: noise pollution ear protectors (AD-005 350/CZ). Defense Documentation Center, Alexandria, VA. 93pp. $4.75.

State-local relationship in the regulation of manufactured building (COM-75-10143/CZ). International Conference of Building Officials, Whittier, CA. 112pp. $5.25.

Economic analysis of effluent guidelines: the non-ferrous metals industry (aluminum). (PB-239 161/CZ). Arthur D. Little, Inc. 151pp. $6.25.

Economic analysis of effluent guidelines: the petroleum refining industry (PB-239 336/CZ). Environmental Protection Agency, Washington. 86pp. $4.75.

Comparative evaluation of military and commercial ammonia oxidation plants using the pressure process (AD-005 045/CZ). Army Constrution Engineering Lab, Champaign, Ill. 75pp. $4.25.

Developments in computer-aided software maintenance (AD-005 827/CZ). Ams Inc. Claremont, CA. 265pp. $8.50.

Energy conservation: a case study for a large manufacturing plant (PB-239 302/CZ). MIT Energy Lab. 111pp. $5.25.

Impact of energy shortages on the iron and steel industries (PB-238 749/CZ). Booz, Allen Applied Research, Bethesda, MD. 300pp. $8.75.

Evaluation of a home solar heating system (UCRL-51711/CZ). U. of California, Livermore, 154pp. $7.60.

Method of testing for rating solar collectors based on thermal performance (COM-75-10276/CZ). National Bureau of Standards, Thermal Engineering Systems. 64pp. $4.25.

Women and the economy: a bibliography and review of the literature on sex differentiation in the labor market (PB-241 193/CZ). Ohio State U. Center for Human Resource Research. 93pp. $4.75.

Directory of U.S. export management companies (COM-75-10518/CZ). Bureau of International Commerce, U.S. Dept. of Commerce. 48pp. $3.75.

Hazard assessment of aluminum electrical wiring in residential use (COM-75-10516/CZ). National Bureau of Standards, Product Systems Analysis Div. 59pp. $4.25.

Evaluation of the impact of discriminatory taxation on the use of primary and secondary raw materials (PB-240 988/CZ). Booz, Allen & Hamilton, Washington, D.C. 148pp. $5.75.

Economic analysis of effluent guidelines: the fertilizer industry (PB-241 315/CZ). Development Planning and Research Assoc., Manhattan, KA. 213pp. $7.25.

Some impacts of no-fault automobile insurance: A technology assessment, vol. I (PB-241 382/CZ). Institute for the Future, Menlo Park, CA. 199pp. $7.

Deep ocean mining in legal perspective (COM-75-10008/CZ). Merchant Marine Academy. 126pp. $5.75.

Economic aspects of effluent guidelines for the asbestos industry (PB-238 268/CZ). Arthur D. Little, Inc. 116pp. $5.25.

Handbook on materials for superconducting machinery (AD/A-002 698/CZ). Battelle Columbus Labs. 597pp. $35/$35.

Vinyl chloride: an assessment of emissions control techniques and costs (PB-237 343/CZ). Research Triangle Inst., Durham, N.C. 85pp. $4.75.

Actions of pesticides and other drugs on the male reproductive system (PB-237 381/CZ). West Virginia U. Medical Center. 41pp. $3.75.

Revised and updated cost estimates for producing alumina from domestic raw materials (PB-234 683/CZ). U.S. Bureau of Mines. 58pp. $4.25.

Select bibliography on explosions in industrial plant with particular reference to design aspects of explosion containment and relief (PB-236 352/CZ). British Steel Corp. 18pp. $3.25.

Aluminum as a component of solid waste and a recoverable resource (PB-235 770/CZ). National Environmental Research Center, Cincinnati. 39pp. $3.75.

Dependence of the United States on essential imported materials, Year 2000. Vol. I (AD/A-000 843/CZ). Arthur D. Little, Inc. 121pp. $5.25.

Cost sharing for shoreline protection (AD-787 327/CZ). National Bureau of Standards. 73pp. $4.25.

Bibliographies Available

The following bibliographies, with abstracts, are available from NTIS for $25 each in both paper and microfiche):

Productivity (COM-74-11571/CZ). 142pp.
Air pollution effects on materials (NTIS/PS-74/113/CZ). 73pp.
Air pollution economics (NTIS/PS-74/091/CZ). 218pp.
Air pollution emission factors (NTIS/PS-75/410/CZ). 74pp.
Solid waste disposal economics (NTIS/PS-74/092/CZ). 92pp.
Alcoholism (NTIS/PS-74-110/CZ). 151pp.
Carcinogens (NTIS/PS-74/086/CZ) 134pp.
Drag recucing fluids (NTIS/PS-74/109/CZ). 150pp.
Dye lasers (NTIS/PS-74/120/CZ). 156pp.
Fire resistant fibers and textiles (NTIS/PS-74/111/CZ). 140pp.
Housing (NTIS/PS-74/132/CZ). 137pp.
Ocean law (NTIS/PS-74/134/CZ). 139pp.
Offshore drilling (NTIS/PS-74/103/CZ). 111pp.
Production planning and scheduling (NTIS/PS-74/124/CZ). 143pp.
Waste processing and pollution in the chemical and petrochemical industries (NTIS/PS-74/118/CZ). 188pp.
Water pollution economics (NTIS/PS-74/094/CZ). 215pp.
Radioactivity from nuclear power plants (NTIS/PS-75/429/CZ). 232pp.
Structural mechanics software (NTIS/PS-75/428/CZ). 190pp.
Consumer products and consumer affairs (NTIS/PS-75/409/CZ). 46pp.
Computer information security and protection (NTIS/PS-75/437/CZ). 172pp
Blindness (NTIS/PS-75/427/CZ). 118pp.
Electric automobiles (COM-74-11573/CZ). 76pp.
Human Memory (NTIS/PS-75/297/CZ). 135pp.
Effects of fatigue on human behavior and performance (NTIS/PS-75/161/CZ). 109pp.
Microwave communication (NTIS/PS-75/250/CZ). 168pp.
Interactive computer graphics (NTIS/PS-75/158/CZ). 131pp.
Semicondutcor computer storage (NTIS/PS-75/274/CZ). 94pp.
Integrated circuit reliability (NTIS/PS-75/247/CZ). 178pp.
Gunn effect devices (NTIS/PS-75/227/CZ). 145pp.

Standard-Setting Unit Marks 75th Year With Special Events

More noted for calibrations than for celebrations, Commerce's National Bureau of Standards is observing the Bicentennial and its own diamond jubilee with a busy schedule of activities.

The National Bureau of Standards was established by act of Congress on March 3, 1901, and opened its doors in July of that year.

The need for a central source and monitor of national standards was recognized at the birth of the Republic because of the prevailing chaos in weights and measures then in use. In the Articles of Confederation (1781)—a clause that was also carried over into the Constitution (1789)—Congress and the national government were empowered to coin money and regulate its value and to "fix the standard of weights and measures." Early scientist-statesmen thought in terms of a possible national university and federal societies of the arts and sciences, dedicated to the promotion of agriculture, commerce, trades and manufactures.

As NBS observes its Diamond Anniversary, the stepped-up pace of change is strikingly evident. The contrasts between 1776 and 1901—great as they were—pale by comparison with those between 1901 and 1976. When NBS opened its doors in 1901, the country of 76 million people was just getting started in its industrial revolution.

As late as the end of World War I, the benefits of electricity were enjoyed by only one home in 10 in the city, and even fewer in rural areas. There were 13 bathtubs and six telephones for every 100 city dwellers—but already the automobile had become a prized possession of one out of every 13 persons.

Now, in 1976, with U.S. population more than 215 million, the country is in a continuing industrial revolution, and yesterday's luxuries are today's necessities. NBS today has been entrusted with responsibilities that include the development of performance standards and applied research in such areas as energy conservation, time and frequency, materials and mechanical failure, building technology, fire protection, and computer sciences.

Some examples of NBS contributions suggest something of the Bureau's scope and versatility:

—Development of the first neon tube, 1904.

—Radio direction finder for safer flying, 1915.

—Decisive work on purification of uranium for use in the atomic pile, 1939.

—First U.S. successful guided missile, "The Bat," 1944.

—First automatically sequenced high-speed electronic digital computer in the United States, 1950.

—Development of the water turbine, contra-angle, high-speed dentist's handpiece, forerunner of today's air-driven drill, 1953.

NBS also developed Commerce's first Simplified Practice Recommendations and Commercial Standards in 1921, the basis for a "Buyer's Bible" of 27,000 specifications for 6,650 commodities.

Special events

In conjunction with its 75th anniversary, the National Bureau of Standards has scheduled a series of special events. These include:

- May 6-8—Open House at NBS headquarters in Gaithersburg, Md., with 84 laboratories open to the general public.
- July 26-28—The NBS Institute for Computer Science will present an anniversary symposium on Computers in Our Democratic Society.
- September 20-24—The NBS Institute for Materials will present an anniversary symposium on Environmental Measurement Science.
- October 14-16—NBS facilities at Boulder, Colo., will hold an Open House.

Satellites Help Pinpoint Location Of Downed Planes

Extra "eyes in the sky" are helping to save the lives of air crash victims in remote areas.

The amount of time Civil Air Patrol air search and rescue pilots spend finding downed private business and pleasure aircraft in the rugged mountains of California has been substantially reduced through data from environmental monitoring satellites operated by Commerce's National Oceanic and Atmospheric Administration.

Pictures from the agency's spacecraft showing weather conditions in areas where light planes have become lost have vastly improved search efficiency. In addition, NOAA satellite information has made the search operations themselves considerably safer.

During the past year, when the CAP's California Wing flew some 58 search missions for lost aircraft, all but two were found within 48 hours. The year before, when 46 missions were conducted, CAP pilots generally spent more than a week searching for the crash sites.

Most search and rescue missions for missing aircraft in California involve planes which get into trouble because of bad weather.

"In the past," explained Col. James D. Bigelow, the CAP unit's Director of Operations, "we had only limited weather data because the state has such large rural areas and so many mountains where weather data coverage is poor. This makes it difficult to determine what kind of weather the missing pilot faced at the time of the emergency.

"As a result, we often searched areas which, in fact, had good flying conditions when the missing aircraft crashed, but we had no way of knowing these were areas of low probability.

"With the NOAA satellite pictures, we can see the weather status within 30 minutes of the time the pilot was in distress."

Having information of this sort on hand lets the rescue mission pilots concentrate on areas where the weather was bad at the time of the crash.

Satellite pictures showing weather conditions at the time of the search also help reduce the number of accidents by giving pilots advance warning of dangerous weather in the search area.

Short Of Repairmen, Hospitals Told To Buy Durable Equipment

Selective purchasing of equipment is one way for personnel-short hospitals to prolong the useful life of medical equipment, recommends Commerce's Bureau of Domestic Commerce.

Pointing out that less than 20 percent of U.S. hospitals have adequate maintenance staff and facilities, a recent BDC report calls for special attention in selecting equipment for which staff personnel will not always be available to preform these functions.

Offering guidelines for decision-making in selection, acquisition and establishment of maintenance programs for medical equipment, the publication discusses the experiences of a number of hospital equipment specialists as well as the warranties and maintenance services available from equipment manufacturers.

The 30-page publication, *The Acquisition and Maintenance of Medical Equipment,* includes appendices on medical equipment maintenance data, medical equipment most frequently used in hospitals, and a listing of manufacturers of patient monitoring equipment.

The Acquisition and Maintenance of Medical Equipment is available at $1.30 per copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 and many Commerce district offices.

Report Points Way To Greater Productivity In Local Government

A nationwide group of business leaders has called on state and local governments to increase their productivity through a major overhaul in the way they allocate their resources and deliver services.

In a 92-page policy statement, the Committee for Economic Development said politicians and citizens should make better performance a political issue.

Expenditures by these governments have become a major component of the national economy, and now account for almost 15 percent of the gross national product and over 80 percent of all non-defense government purchases of goods and services. Together, these units employ one of every seven non-agricultural workers.

Productivity improvement can provide financially troubled areas with an alternative to service cutbacks and higher taxes, the statement maintains.

CED is a private nonprofit research and educational organization composed of two hundred trustees who are mostly corporate executives, board chairmen, and university presidents. CED trustees throughout the country are releasing the statement to their governors, mayors, and other public officials.

In part, the statement:

—suggests that state and local governments foster competition with public agencies by contracting for services with private enterprise, permit employees to move freely among governments without losing benefits and pension rights, place greater reliance on labor-saving technology, and improve the evaluation of services and the measurement of accomplishment.

—urges a restructuring of federal grant programs, including revenue sharing, to encourage improvements in the structure and internal management of state and local agencies, proposes the establishment of minimum state standards for evaluating services through "performance auditing," and recommends other steps by which the federal system can be used to encourage greater productivity.

—emphasizes the need to broaden the concept of productivity beyond its traditional definition to include both efficiency and effectiveness.

"It is not enough to consider productivity a measure of output to input for a specific government activity or a limited means of either 'getting more for less' or simply prompting bureaucrats to work harder." Productivity also encompasses effectiveness, the extent to which government programs achieve their objectives, the report states.

The CED report provides no single technique or specific innovation, but stresses a concept of doing business that constantly seeks higher performance at minimum cost. However, it finds that the greatest opportunity for practicing this technique lies in strengthened management. "By clearly linking the performance of agencies to their managers' salaries, prospects for promotion, and reputations" state and local governments will provide "incentives for managers to manage."

Copies of *Improving Productivity in State and Local Government* are available for $4 (paper, $2.50) from Committee for Economic Development, 477 Madison Ave., New York, N.Y. 10022.

Calendar Of Business Events

Apr. 25-27 — Arlington, Va. — National Assn. of Industrial Parks Road Show Seminar, Crystal City Marriott. For information, Clint Frank (703-525-5638).

Apr. 25-27—Richmond, Va. — Southern Regional ABA Bank Card Conference, Richmond Hyatt Hotel. For information, Andy Ernst, American Bankers Assn., 1120 Connecticut Ave. NW., Washington, D.C. 20036 (202-467-5407).

Apr. 26-29 — Dearborn, Mich. — Great Lakes/Seaway Port Development and Shippers Conference, Dearborn Inn. Sponsors: Maritime Administration, U.S. Coast Guard, U.S. Army Corps of Engineers, St. Lawrence Seaway Development Corp. For information, Marvin Pitkin (202-967-2578), John Pisani (202-967-3350) or George J. Ryan (206-293-3623).

Apr. 24—Nationwide—Keep America Beautiful Day. An observance to highlight continuing environmental improvement programs on the local level. For information, Keep America Beautiful, 99 Park Ave., N.Y. 10016 (212-682-4564).

Apr. 26-29 — Cleveland — 1976 International Tool & Manufacturing Exposition & Engineering Conference, Cleveland Convention Center. For information, Society of Manufacturing Engineers, P.O. Box 930, Dearborn, Mich. 48128 (313-271-1500).

Apr. 26-30—Tucson—Second Annual Reliability Testing Institute, Ramada Inn. For information, Dr. Roy G. Post, Nuclear Engineering Dept., Bldg. 14, Reliability Testing Institute, Univ. of Arizona, Tucson 85721 (602-884-3054).

Apr. 26-30—Austin — International Ex-Students' Conference on Energy, Univ. of Texas. For information, Univ. of Texas at Austin, P.O. Box Z, Austin, Tex. 78712.

Apr. 27-28—Philadelphia — International Business Environments and Operations Seminar, Bellevue Stratford Hotel. For information, Randy Clark, Business Administration Bldg., Room 310, Penn. State Univ., University Park, Pa. 16802 (814-865-3436).

Apr. 27-30—Chicago — National Micrographics Assn. 25th Annual Conference and Exposition, McCormick Place/Conrad Hilton Hotel. For information, Conference Director, National Micrographics Assn., 8728 Colesville Rd., Silver Spring, Md. 20910.

Apr. 28-29—Gaithersburg, Md. — Workshop on Standard Reference Materials for Mine Drainage, National Bureau of Standards Administration Bldg. For information, Donald Becker, NBS Energy-Environment Workshop Coordinator (301-921-2128).

Apr. 30—Myrtle Beach, S.C. — Business Opportunity/Federal Procurement Conference, Landmark Motor Inn. For information, Marsha McGraw, Office of Congressman John W. Jenrette, Jr., 426 Cannon House Office Bldg., Washington, D.C. 20515 (202-225-1947).

Apr. 30—Milwaukee—Marketing and the Law, Performing Arts Center. For information, Suzanne Wren, Wisconsin Gas Co., 626 E. Wisc. Ave., Milwaukee 53202 (414-276-6720).

May 2-5 — Washington, D.C. — Annual Workshop/Business Meeting of Industrial Development Research Council, Key Bridge Marriott Hotel. For information, Martha Finley, IDRC (404-458-6026).

May 3-5—Arlington, Va.—Seminar on Mini-Computers, Stouffer's National Center Inn. For information, Advanced Mgt. Research Int'l, Inc., 1370 Avenue of the Americas, New York 10019 (212-765-6400).

May 6-8—Gaithersburg, Md.—Open House, National Bureau of Standards. For information (301-921-3876).

May 11 — Hyannis, Mass. — Business Opportunity/Federal Procurement Conference, Dunfey's Hyannis Resort & Conference Center. For information, Robert Francis, Office of Rep. Gerry E. Studds, 1511 Longworth House Office Bldg., Washington, D.C. 20515 (202-225-3111).

Energy Management Digest

FIRM HAS BETTER IDEA . . . Make a better light bulb, and the world will beat a path to your door, to paraphrase the adage. A light bulb that could last a decade and use 70 percent less energy than conventional bulbs has been invented, and will be developed over the next year under an Energy Research and Development Administration contract with the inventor, Lighting Technology Corp. of Fullerton, California. The fluorescent "Litek" bulb resembles a 100-watt incandescent bulb, fits standard sockets, and produces a warm white light similar to the familiar incandescent bulb. Because it contains no wire filaments that can burn out, it can last at least several years and possibly a decade or more. Preliminary studies show that full nationwide use of this new electrodeless fluorescent lamp could save more than the equivalent of 500,000 barrels of oil per day.

REVISING DISCLOSURE RULE . . . The Nuclear Regulatory Commission is amending its regulation governing disclosure to the general public of trade secrets and confidential or privileged commercial or financial information received from private interests. Under the amended rules an application for exemption from disclosure will now have to be accompanied by an affidavit from the owner showing that the information has been treated as confidential, has monetary value, and that disclosure will be likely to cause substantial harm to the owner's competitive position. In the event the application is denied and the applicant makes a timely request for withdrawal of the document, it will not be made public, but will be returned to the applicant.

AFFORDABLE SOLAR HOME . . . The recently-completed Energy House Project at Quechee Lake, Vermont, was conceived as a means of demonstrating that a house incorporating solar energy and energy conservation techniques can be built for a middle-income homeowner. A solar-heat, pump-oil system, cost competitive in today's market, was chosen as the heat supply system. The heart of this solar system is 400 square feet of collectors which heat an anti-freeze fluid that is circulated to a heat pump.

BACK TO THE FOREST . . . The Russel Corp., the largest U.S. manufacturer of athletic apparel, has become the first non-forest products firm to switch from oil or gas to wood waste as its primary power source. The firm expects annual savings of six million gallons of oil, or 50 percent of outlays for fuel at its Alexandria City, Alabama, textile mill. The savings are expected to make up the $1.7 million cost of the new boiler installation in five years. Wood presents no environmental problems, since it contains no sulfur and little ash, and is renewable.

UPPING THE ANTE . . . Stiffer penalties will be imposed on violators of FEA's pricing and allocation regulations under terms of new rules proposed by the agency. The recently signed Energy Policy and Conservation Act increased the limits for civil penalties to as high as $20,000 per violation. Criminal penalties of up to $40,000 and one year in prison may be imposed for certain categories of violations committed since December 22, 1975. The FEA's previous limits were $2,500 for civil violations and $5,000 for criminal acts, with no provisions for imprisonment. Under EPCA, three categories of violations are created. Activities involving crude oil production, distribution, and refining are subject to the $20,000 and $40,000 limitations. Activities involving refined products and residual fuel oil (except at the retail level) will have maximum penalties of $10,000 (civil) and $20,000 (criminal), and retail-level violations will have $2,500 (civil) and $10,000 (criminal) maximums. EPCA also expressly adopts existing judicial precedent to the effect that penalties may be assessed against "directors, officers or agents" of corporations for their participation in unlawful corporate activities, but limits imprisonment of such persons to instances where they received prior notice of the firm's violations.

FLUID POWER UPSWING . . . The energy outlook is improving the prospects for at least one U.S. industry. "The future prospects for fluid power are bright," according to H. Thomas Douglas, President of Componetrol, a subsidiary of I-T-E Imperial Corp. "In the immediate future, we see significant changes looming for energy conservation in mobile equipment, as well as major re-tooling in Detroit as a new generation of automobiles goes into production." Both are expected to require substantial investments in such products as hydraulic and pneumatic control devices, cylinders, tubing, pumps and related circuitry.

U.S. Negotiators Propose Tariff Reduction Formula In Geneva Trade Talks

A significant tariff cutting proposal by the United States has moved the Multilateral Trade Negotiations being held in Geneva into a new and important phase.

The U.S. negotiating team, acting at the March 23-26 meeting of the MTN Tariffs Group, placed on the table a comprehensive plan for tariff reductions by the world's industrialized nations. Developed after extensive discussions with representatives of U.S. private enterprise and consultations with Congress, the U.S. proposal seeks to achieve a significant overall reduction in tariffs and harmonization of rates. The formula involved is considered by U.S. negotiators to be more ambitious than the formula of 50 percent reductions that was the basis of the Kennedy Round negotiations of the mid-1960s.

Aims of formula

In making the proposal, whose details are not being disclosed, the United States is seeking to concentrate the reduction of duties within the range in which the large majority of developed country tariffs and trade are found, to insure more equitable access among developed country markets, and to provide more secure and favorable access to developed country markets for less developed country (LDC) exports. Consistent with these objectives, the U.S. has proposed a formula which includes both "harmonization" and "linear" elements. That is, part of each duty reduction would depend on the original duty level, and part would be independent of the duty level.

Relation of tariffs to rest of MTN

The reduction of tariffs is a major element of this MTN round. However, unlike previous rounds which concentrated almost exclusively on tariffs, this round (sometimes called the "Tokyo Round" after the Tokyo Declaration which formally opened the negotiations) will deal with a wide range of barriers to trade. The U.S. is committed to securing both significant tariff reductions and extensive liberalization of nontariff barriers (NTBs) to trade.

Tariff issues

With the presentation of the U.S. formula proposal, the negotiations on a tariff plan are fully under way, and it is hoped that agreement can be reached before the end of the year. However, before a tariff formula can be agreed upon a consensus will have to be reached on some key issues related to multilateral tariff reductions. Among these are form and depth of cut, product coverage, rules and procedures for exceptions, and treatment of products of importance to LDCs.

Form and depth of cut

The U.S. proposal calls for a significant overall reduction of duties while shaping those reductions in a harmonization form under which higher duties are cut more than lower ones. Most major United States trading partners are particularly interested in the level of harmonization which would be achieved under a tariff-cutting formula. Accordingly, it is expected that further formula discussions will concentrate on this issue.

Product coverage and exceptions

Two related issues are those of product coverage and rules and procedures for exceptions. With regard to the former, the United States has proposed that the formula would apply, in principle, to all product areas including agriculture. While this element is supported by a number of countries, the European Community in particular continues to favor separate negotiations on agriculture.

Whatever mix of tariff formula and product coverage is negotiated, agreement will also have to be reached on rules and procedures for determining exceptions to the formula. Thus far, there is a general view developing within the Tariffs Group that maximum restraint ought to be placed on the ability of countries to "except" items.

Product coverage and exceptions are central issues in a multilateral tariff reduction. This is shown by the fact that while the Kennedy Round tariff formula was a straight 50 percent linear cut, overall tariffs were reduced on the average by only 35 percent as a result of less than universal product coverage and exceptions to the formula.

Treatment of LDC products of interest

While the developing countries are not expected to apply the tariff reduction formula to their duties, they are vitally interested in the tariff formula negotiations for two primary reasons.

First, LDCs want to see "tariff escalation" eliminated or significantly reduced. "Tariff escalation" refers to the imposition by a developed country of no or low

Duty Levels Today

The Tokyo Round is the seventh round of multilateral trade negotiations. Prior to the Kennedy Round of 1964-1967, tariff negotiations were conducted on a "line-by-line" basis, with each country exchanging lists of offers and requests for tariff reductions with every other country participating. However, this was a cumbersome, time consuming process which led to a limited number of tariff reductions as countries mutually pared down their offer lists to arrive at equitable exchanges of reductions.

The Kennedy Round was the first truly multilateral tariff negotiation in which the "formula countries" reduced many tariffs by 50 percent. The result was a significant (35 percent) drop in the average tariff level of developed countries.

However, substantial tariff barriers remain in place (see chart, next page). This is why U.S. negotiators believe a further significant step towards the elimination of tariff barriers to trade is needed in the Tokyo Round.

duties on primary products, higher duties on semi-manufactures, and still higher duties on finished goods. LDCs see tariff escalation as an obstacle to the development of processing industries and to the diversification of their exports away from dependence on primary products or raw materials.

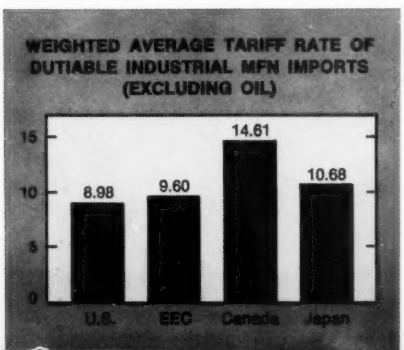
Secondly, LDCs are seeking forms of "special and differential treatment" on products of export interest to them. Such treatment is being sought in order to give attention to the special needs of the LDCs and in recognition of the possible erosion of preferential margins of duty as the result of the reduction of general Most-Favored-Nation tariffs. The developed countries, in the Tokyo Declaration, have undertaken a commitment to such treatment where feasible.

With regard to these LDC concerns, the U.S. proposal would significantly decrease present levels of tariff escalation, and would provide for special procedures under which specific LDC tariff problems could be identified and thus provide a basis for consideration of special and differential treatment. Further discussion of these issues is expected to be a significant part of the negotiation on a tariff formula.

New stage

This meeting of the MTN Tariffs Group marked an important new stage in developing a tariff negotiating plan. While delegations were able to give only preliminary reactions to the U.S. proposal, there did appear to be a consensus beginning to develop in favor of a plan which would 1) contain an important element of harmonization along with a significant reduction of duties, 2) reduce the escalation of tariffs, 3) call for great restraint in any provision for exceptions, and 4) recognize that the negotiation of tariffs must take into account the negotiation of nontariff measures as well. In addition, progress was made in the discussion of possible rules and procedures for providing special treatment in the tariff field for exports of LDCs.

Delegations are now expected to take time to reflect on the U.S. proposal and the various views expressed in the meeting. The next session of the Tariffs Group is scheduled for the week of July 5, and will likely be preceded by a series of bilateral consultations.



Multilateral Trade Negotiations

This article is another in a series of progress reports on the multilateral trade negotiations, prepared by the Commerce Department Office of International Trade Policy.

GENEVA

Four panels met, in accordance with GATT Article XXIII (2), and reviewed Common Market complaints against the U.S. DISC export tax incentive and U.S. complaints against tax practices of Belgium, France and the Netherlands. Canada, while not an actual complaining party, was invited to attend the DISC case discussions and allowed to submit a statement in opposition to DISC. Next sessions, in early summer, will hear defenses of these practices. Final submissions are due by August. Work on a final report will then begin.

PARIS

Ambassador William N. Walker of the U.S. MTN Delegation, at a press conference, took up and denied charges made in Europe and elsewhere that the U.S., while avowing a free trade attitude, is in practice restricting access to its markets with protectionist policies.

Walker explained the current accountability of the Administration, under the Trade Act of 1974, to Congress, business and the general U.S. public. He said that where serious import injury to U.S. business is deemed to have occurred, the Administration becomes accountable to the injured parties, who have several options for relief. The trade-offs which ensue, Walker emphasized, must be weighed and justified. While individual trade restrictions may prompt fears of protectionism—and Walker noted that the Common Market, on its part, has practices that limit U.S. access to its markets—the Administration's overall concern is in solidifying and improving commercial relations among the industrialized Western nations and that concern should be recognized, Walker asserted.

LIMA

At the second session of the **UN Commission on Transnational Corporations** March 1-12, the U.S. proposed that the Commission request the UN Economic and Social Council (ECOSOC) to give priority consideration to the preparation of an international agreement to establish certain standards and procedures with the aim of eliminating corrupt practices in international trade and investment transactions and to establish an experts group to prepare recommendations for such an agreement.

The U.S. also proposed that the agreement apply equally to those who offer or make improper payments and to those who request or accept them. It said importing governments should agree to: 1) establish clear guidelines concerning the use of agents in connection with government procurement and other covered transactions and; 2) establish appropriate criminal penalties for defined corrupt practices by enterprises and officials in their territory. Because country delegations did not have time to check with their governments on this proposal and there was a question as to the Commission's mandate, the Commission agreed to forward to ECOSOC the U.S. proposal for agreement on bribery as an annex to the Commission report.

WASHINGTON

Industry Sector Advisory Committees (ISACs) will meet in closed plenary session April 13 to discuss issues of safeguards, border taxes and sectors. Preparatory background papers on the safeguard and border tax issues have been provided to members.

The next round of major ISAC meetings will be held June 2-15 at a series of two-day closed sessions. Discussions will center on quantitative restrictions and government procurement, and members will also continue to fine-tune their advisory reports. At further meetings, scheduled for Sept. 20-30, a similar format will be followed, with discussion topics chosen on the basis of current MTN developments. Individual committees may also meet at other times, if the necessity arises.

ISAC 5 **(Industrial Chemicals and Fertilizers)**, at a March 31 meeting discussed the tariff cutting formula and other matters and decided to reexamine its advisory report. A six-member ad hoc group was appointed for this purpose.

ISAC 27 **(Retailers)** is meeting April 12 to review a draft of its report that has been compiled by Commerce analysts on the basis of submissions from individual members.

The Steering Group of ISAC 20 **(Scientific and Controlling Instruments)** will meet April 13, prior to the plenary session, to review recent submissions to the committee and consider positions and responses regarding the standards code and the DISC.

Labor Sector Advisory Committee meetings will be hosted by the Labor Department April 27-29 to review and add to advisory reports and evaluate a possible U.S. proposal for a new international safeguard system.

MISSION IN ITALY—*At Genoa Port Authority headquarters, model of current facilities plus planned expansion is explained by official (with pointer). Others, from left: mission members C. R. Morgan and Donald Yearwood; Director Tilton H. Dobbin; Giuseppe Dagnino, President, Genoa Port Authority; U.S. Consul General Gori P. Bruno (partially hidden); Deputy Director Larry C. Cozart; Sverre Eriksen.*

Port-Touring Mission Sees Go Signals For U.S. Suppliers In Southern Europe

Current plans for port and shipyard expansion in Italy, Yugoslavia, and Greece should alert U.S. equipment suppliers to arrange on-scene representation immediately. Prospects for business turned up at every port visited by a recent U.S. trade mission to these countries. Just how solid such leads are will depend to some extent on the thrust of the changing world economy and on each country's ability to "carry through" on the various plans, but mission members and port and shipyard officials are optimistic about both.

"The major question is when the decisions will be made and when the money will become available to make the necessary purchases," observes Tilton H. Dobbin, who headed the Commerce Department mission. "That is why it is so important that U.S. suppliers become established in all three countries now, to take advantage of these upcoming—but not 'time-specified'—opportunities. Such factors as recovery from the current world recession with its direct bearing on shipbuilding and port activity, the expanded use of the Suez Canal, the availability of financing, and the personal efforts of U.S. suppliers all will weigh heavily on the timing and success of U.S. equipment and service sales in this field." Dobbin, now retired, was formerly Assistant Secretary of Commerce for Domestic and International Business.

Mission participants represented seven U.S. firms supplying mobile cranes, welding equipment, heavy lifting and moving systems, shipboard instrumentation and controls, straddle hoists, and engineering and consulting services. All but one of the companies were new to the markets in at least two of the three countries. In all of the countries, the products are competitive with other imports in both price and technology.

Longer term markets in Italy

Port and shipyard markets in Italy are not appraised by the mission as immediate—mainly because of the current political and economic situation. The recent devaluation of the lira does give Italian suppliers a temporary price advantage, but U.S. suppliers are still competitive with third-country products and in time should become more so even with Italian suppliers. Key contacts, as the opportunities do open up, will be the port authorities in Naples, Trieste, and Genoa—all visited by the mission—and the Italcantieri shipbuilding organization. Contacts with Italians holding major contracts in third countries also are important. The group found a keen interest in U.S.-designed products.

Yugoslavs to buy soon

Major sales opportunities in Yugoslav ports and shipyards should become available between now and 1980, as planning by most facilities on the country's Adriatic Coast is aimed at development and purchasing over the next two years. Yugoslav law requires that sales be made through a Yugoslav agent.

The U.S. group traveled to virtually all of the chief ports on the Yugoslav Adriatic Coast, including Koper, Rijeka, Split, Ploce, and Bar, and the Third of May and Split shipyards. In Rijeka, the director of purchasing for all Yugoslav shipyards met with the participants representing such equipment. The mission again found a strong interest in U.S. products. One member concluded a sale—most unusual for a two-day visit—and others were asked for price quotations. One said that prospects for his products were even greater in Yugoslavia than in Italy.

Expansion in Greece

The visit to Greece was concentrated in the Athens-Piraeus area, with tours of the two major shipyards, Skaramanga and Eleusis, near Piraeus. Greek officials are optimistic about a pickup in port and shipyard business in the not-too-distant future, and are planning expansion of facilities to meet that demand. This extensive new development will greatly expand the need for materials handling equipment, marine consulting services and marine deck equipment. The Maritime Club in Piraeus provided a forum for representatives and technicians from five major ports—Piraeus, Thessaloniki, Heraklion, Patras, and Volos—to describe their activities and purchasing plans. Opening the seminar, Merchant Marine Minister Alexander Papadonghonas urged increased Greek reliance on U.S. technology. Similar attitudes were expressed to Mission Director Dobbin by the presidents of the Association of Greek Shipowners, Athens Chamber of Commerce, Piraeus Port Authority, and senior officials of the Hellenic Industrial Development Bank.

Sales projections by the mission members demonstrate their belief that the current year should end with some excellent results — $24.3 million is the estimate for the three countries.

"The new contacts we made in Naples alone pay for our trip," said Rick Hammett of Harnischfeger Corp., a Milwaukee firm.

"Business appointments proved more than expected. It will be hard to follow up because of the volume of opportunities generated," noted Sverre Eriksen, AIRCO, Union, N.J.

And Al Schmidt, Hydranautics, Goleta, Calif., concluded: "The mission has extreme value in giving us the opportunity to meet the presidents of purchasing organizations."

The additional members were: Michael McCourt, Dunbar Kapple, Inc., Batavia, Ill.; C. R. Morgan, Harnischfeger Corp., Milwaukee; John P. Perscheid, Leslie Int'l, Parsippany, N.J.; Rodger W. Ogden, Marathon LeTourneau Co., Long View, Tex.; and Donald R. Yearwood, John J. McMullen Group, New York. Larry C. Cozart of the Commerce Department served as the mission's deputy director.

ANALYSIS IN PROCESS—*Two representatives (left) of European subsidiary of Varian Associates are demonstrating to two customers (right) at laboratory instruments show, Frankfurt U.S. Trade Center, an analysis with an atomic absorption spectrophotometer, equipped with carbon rod atomizer.*

Price Often Clinching German Sales, U.S. Instrument Exhibitors Report

Price is not the dominant factor in the majority of sales in Germany but the attractiveness of a U.S. product's price often clinches the deal. This was the conclusion of a veteran agent active in the German market during a recent exhibition of analytical instruments at the U.S. Trade Center in Frankfurt.

For many products, especially those considered to have the best sales potential, price plays a less significant role than technological advantage. For many other products, however, price is significant, because the host country or neighboring countries produce equipment of like quality and a moderate price advantage may outweigh the local-delivery-time benefit.

Products in the "best-potential" category include scintillation detectors, certain spectrophotometers, pulse-height analyzers, integral electronic sizing and counting systems, liquid chromatographs, spectro-densitometer systems, and automatic concentrating chromatograph analyzers. Speed, accuracy, practicality of design and easy maintenance are selling points for such items, exhibitors observed. Among products of moderate potential are refractometers, rotating microtomes, colony counters, gas chromatographs, portable organic vapor analyzers, analytical accessories, laboratory data systems and centrifuges, recorders (charge units), X-ray fluorescence analyzers, and integrators. For such items, selling points in addition to price are efficiency, reliability, economy of operation, and familiarity.

For most oscilloscopes, balances, infrared radiators and laboratory thermometers—considered of marginal potential—the price differential must be significant in favor of the U.S. product to overcome the many advantages of the European product.

Technological demands within Germany over the next two years are likely to be more limited than those of the U.S. end user in this industry, according to the majority of exhibitors. The reason: last year's economic recession in Germany, to which the government had reacted by cutting or restricting expenditures for research and clinical laboratories. Concern about the rising cost of national medical care also is causing the state and private hospitals throughout the country to back away from major purchases of laboratory instruments, particularly the more expensive, newer generation counterparts of what they already operate. Though not to the same extent, the German industrial sector seems also to be in a wait-and-see mood.

The 21 exhibitors representing 36 U.S. companies reported floor sales totaling $68,000 and 12-month projections at $4.9 million. One joint venture agreement was signed; two representatives were appointed.

'Blue-Ribbon' Leads Stem From Stockholm Instrument Display

U.S. instruments demonstrated their continued strength for the Scandinavian market at a recent Stockholm Trade Center show.

Twenty-one exhibitors representing 44 U.S. companies displayed laboratory and analytical instruments for physical and chemical measurement. The event was particularly successful in attracting key buyers and technical managers. Again and again, exhibitors noted that nearly every attendee was a "blue-ribbon" contact. Visitors were from government organizations, industry, educational institutions, hospitals, and industrial and other private research centers.

Products which demonstrated the best current potential in the exhibition were particle-size counters and analyzers for both liquids and gases, cell counters, lasers and accessories, X-ray analysis systems, digital image processing systems, polarographs, microbalances, freezers and refrigerated incubators, high-pressure liquid chromatography instruments, pyroelectric radiometers and detectors, various other light measurement instruments and electro-optical components, tunable flash-lamp-excited dye lasers, glassfiber guides, infrared and atomic absorption spectroscopy, and intense coherent U.V. radiation generators.

Immediate sales totaled $51,000; 12-month projected sales, $2.6 million. Two firms signed representation agreements during the exhibition; five are under negotiation.

INSTRUMENTS SHOW, STOCKHOLM—*Charles Hintze (right) of Biotec AB, exhibiting for 10 U.S. principals, demonstrates electro-optical products. From left: Ernest Sohns, U.S. Embassy; Prof. Gunnar Widmark, Stockholm U.; Walter Stadtler, Trade Center director.*

U.S. Exports To Near East/North Africa In 1975

Values in millions of dollars

	Syria	Lebanon	Iraq	Iran	Israel	Jordan	Kuwait	Saudi Arabia	Qatar	United Arab Emirates	Oman	Bahrain	Morocco	Algeria	Tunisia	Libya	Egypt
Total Exports & Reexports	127.8	402.3	309.7	3,241.7	1,551.3	195.4	366.1	1,501.8	50.3	371.5	74.7	90.2	199.5	631.8	90.0	231.5	682.7
Food & live animals	36.5	27.5	82.0	334.1	207.2	18.9	7.0	106.1	1.0	6.5	1.0	2.4	63.7	205.4	34.6	3.7	244.9
Cereals & preparations	35.5	21.3	81.7	317.5	194.6	17.4	1.0	84.7	—	1.8	—	—	62.8	192.9	34.5	1.5	240.3
Beverages & tobacco	16.1	14.3	1.0	24.7	3.6	—	14.7	18.3	1.0	13.7	1.0	5.3	3.7	1.2	1.0	12.0	16.8
Crude materials, inedible, except fuel	2.9	10.7	10.1	39.2	111.6	1.0	2.5	6.2	1.0	3.6	—	—	4.9	3.5	6.7	1.0	19.7
Mineral fuels, lubricants	1.0	—	3.7	5.5	1.6	1.2	2.3	13.0	1.0	1.7	—	2.9	—	2.2	—	1.0	15.5
Oils & fats, animal & vegetable	—	3.8	1.8	82.9	3.4	—	1.7	9.7	—	1.0	—	—	3.9	9.6	8.2	—	159.7
Chemicals	5.4	12.2	14.2	131.3	38.1	2.2	12.0	33.2	1.6	12.6	1.1	8.4	2.9	4.2	1.0	11.2	25.2
Mfg. goods by chief material	7.6	21.5	34.1	342.0	118.2	2.9	22.2	122.1	5.3	76.9	31.0	9.4	10.0	85.3	5.5	39.1	69.0
Paper, paperboard & mfrs.	1.0	8.9	—	17.5	27.6	1.0	2.8	8.1	—	1.3	—	1.0	1.0	—	1.3	1.3	21.5
Yarn, fabrics & articles, textiles	1.0	5.7	—	12.6	16.4	1.0	3.3	8.8	1.0	3.3	—	1.0	4.7	—	1.0	1.0	—
Iron and steel	2.8	1.0	22.1	249.3	16.4	—	3.7	30.3	2.7	54.6	29.2	3.4	2.5	55.4	2.3	27.3	39.7
Tools for use in hand or mach.	1.0	—	5.2	13.1	2.9	—	1.8	7.5	—	3.7	—	1.0	—	6.8	—	3.7	2.6
Machinery, nonelectric	20.3	45.9	107.0	621.6	174.7	17.3	74.6	344.6	16.8	151.4	15.6	37.3	13.6	182.5	13.7	77.1	65.3
Power generating mach. except elec. & parts	3.7	8.7	11.5	64.9	56.6	2.5	7.4	48.9	1.2	9.4	1.1	22.5	2.8	8.2	1.0	11.4	9.1
Agric. mach. & appl. & parts	4.5	6.4	6.8	80.2	13.0	1.8	2.6	25.9	1.0	5.8	1.0	—	1.1	13.5	1.5	8.1	3.0
Office mach. & parts	—	1.9	—	21.6	15.5	—	1.0	2.7	—	—	—	1.0	—	1.1	1.0	1.0	2.4
Construction & mining mach. & parts	3.7	5.6	30.4	152.5	8.6	4.5	12.1	64.3	3.2	53.6	3.8	14.7	5.3	45.9	5.9	19.1	19.1
Heating & cooling mach. & equip. & parts	1.0	7.2	11.1	67.8	9.4	1.0	22.1	58.8	4.9	40.7	3.7	6.5	1.0	13.5	1.0	5.8	2.9
Pumps, centrifuges, etc. & parts	—	2.7	17.2	41.1	11.8	1.0	7.6	47.1	1.3	15.9	2.5	4.1	1.0	12.3	1.0	17.5	5.4
Mech. handling mach. & equip. & parts	3.3	8.5	10.1	72.8	27.3	1.9	12.9	40.2	3.1	11.5	1.0	3.0	1.1	72.1	—	4.4	3.4
Electric machinery, appar. & appl.	4.5	14.6	11.1	165.6	124.4	7.0	31.6	147.8	3.9	24.8	8.5	5.7	6.4	48.7	3.5	13.5	21.0
Elec. power mach. switchgear & parts	1.0	5.2	5.3	28.5	21.1	1.0	19.4	64.8	1.5	14.9	2.3	1.2	1.0	35.2	—	5.1	15.1
Telecommunication appar. & parts	1.8	3.5	1.6	50.1	53.9	3.7	2.0	30.1	1.2	4.2	5.2	1.6	4.5	6.5	2.7	3.7	1.6
Elec. household equip., appl. & parts	—	3.6	—	11.6	3.6	1.0	5.7	14.7	1.0	1.4	—	1.0	—	—	—	1.4	—
Transport equip.	29.5	218.9	30.9	809.2	144.9	26.4	169.8	435.2	15.5	49.9	9.2	9.1	29.0	82.2	12.0	43.1	28.9
Road motor vehicles & parts	28.9	46.0	23.2	407.8	86.4	8.8	151.3	250.2	14.6	37.1	—	5.6	18.2	45.8	1.0	11.6	25.5
Aircraft, spacecraft & parts	—	171.9	4.7	301.6	53.2	14.3	15.8	175.0	—	5.9	3.6	—	10.6	32.2	10.8	29.7	1.6
Misc. mfg. articles n.e.c.	2.0	22.0	7.8	49.6	34.6	3.4	14.3	69.8	2.6	10.5	2.5	4.0	1.9	5.2	2.3	18.6	10.8
Photo goods, clocks, etc.	1.0	14.8	4.6	19.4	21.4	1.6	3.3	24.7	1.0	3.9	1.4	1.4	—	2.5	1.0	7.7	5.0
Items not class. by kind	1.6	6.2	4.5	18.2	17.0	1.8	4.5	26.0	1.1	8.6	2.3	4.0	1.7	1.3	1.0	9.0	3.8
Special category	—	1.8	—	602.7	528.5	112.3	4.9	157.0	—	10.1	1.0	—	57.1	—	1.1	2.3	—

U.S. trade with the Near East and North Africa area hit record highs last year. U.S. exports reached $10.1 billion, compared with $6.3 billion in 1974 and only $3.5 billion in 1973, while U.S. imports from the area totaled $8.7 billion c.i.f., an increase of 32 percent over 1974.

The accompanying table presents a breakdown of selected U.S. commodity exports to most of the countries in the region in 1975, taken from U.S. Census Bureau statistics. In addition to the commodity exports, American consultants, engineers, architects and construction companies obtained contracts for services in the Near East/North Africa area worth millions of dollars.

The importance of this rapidly growing market to the U.S. balance of trade is exemplified by the fact that in 1975, U.S. exports to the Near East and North Africa were 9.4 percent of our total exports as opposed to only 6.4 percent in 1974. By comparison, U.S. exports to the USSR, People's Republic of China and Eastern Europe, other highly visible markets, were 2.3 percent of the U.S. total in 1974 and 2.9 percent in 1975.

U.S. exports to individual countries in Near East and North Africa also reached record levels during 1975. Iran continues to be our largest customer in the area, having purchased $3.2 billion of U.S. goods in 1975. Two other markets—Israel and Saudi Arabia—imported over $1.5 billion each from the United States for the first time.

The Yemen Arab Republic and People's Democratic Republic of Yemen, not shown on the chart, imported $8.3 million and $2.8 million of goods, respectively, from the United States in 1975.

In several commodity categories appearing in the chart total U.S. sales to the countries shown amounted to more than $1 billion: food & live animals, $1,382.6 million, of which cereals & preparations of cereals were $1,287.9 million; manufactured goods, $1,002.5 million; nonelectric machinery, $1,979.4 million; transport equipment, $2,144.0 million; and special category goods, a total of $1,479.4 million.

The Department of Commerce sees 1976 as an even better year, with U.S. exports to the area expected to exceed $13 billion if U.S. firms continue to increase their efforts in this important market. A detailed analysis of the 1976 trade outlook for major markets including those in the Near East and North Africa area appeared in the Feb. 2 issue of *Commerce America*.

Worldwide Business Outlook

Colombia Channels Record Earnings Into Ambitious Development Projects

Record foreign exchange reserves, an ambitious government development program, and a rapidly growing economy make Colombia a promising place for increased U.S. exports of goods and services, reports Commercial Attache John W. Bowen of the U.S. Embassy in Bogota.

High coffee prices and the continued growth of non-traditional exports have strengthened Colombia's balance of payments position and have led the government to liberalize import policies. Recently the advance deposit requirement for imports was eliminated and a number of products were transferred to the "Free List" category, thus eliminating the need for prior license approval. In addition, the government has initiated an ambitious Development Plan, which includes large investments in health and nutrition, education, agriculture, electric power and telecommunications.

The worldwide recession of the past two years affected Colombia, which saw its real GNP growth slow to 4 percent. Inflation also fell, however, from 26 percent in 1974 to 18 percent in 1975, and exports grew. This year should see a return to the 6-7 percent growth of recent years, with inflation slowing further.

The Lopez administration devoted its first year to price stabilization and financial and tax reform. These mutually reinforcing policies have been largely successful, creating an environment for resumed business confidence and increased government expenditure, and providing some tools for improved fiscal and monetary management.

The most promising areas for increased U.S. sales to Colombia are: electric energy systems; agricultural machinery and equipment; telecommunications equipment; heavy-duty construction, mining, and earthmoving equipment; metalworking and finishing equipment; printing and graphic arts equipment; pollution control equipment; business equipment and systems; and industrial air-conditioning and refrigeration equipment.

With the help of the World Bank, the Colombian Government is giving priority to harnessing the country's excellent hydro-electric potential. Eight very important electric generation and transmission projects are currently under way and scheduled for completion during the next three years. They will add 1,122 MW to current installed capacity. Prequalification and tendering procedures have been initiated for another two major projects (1,120 additional MW) and feasibility studies have been or are being completed for various other projects which would be initiated during the next five years. World Bank assistance is also being used to extend telephone, telegraph, water supply and sewerage services to many smaller cities and towns.

Colombia is the principal agricultural producer of the Andean Pact, and the government is stressing increased production. Heavy purchases of agricultural equipment will be made over coming years, some of which may be financed under the Development Plan. The government also strongly encourages licensing arrangements for the production of agricultural equipment.

The government's electrification and rural road-building program will mean a steady need for earthmoving and road-building equipment. Colombia's plans to become an important coal exporter—most of Latin America's coal reserves are in Colombia—will necessitate large-scale improvements in railroads and ports.

U.S. exports to Colombia traditionally have included a wide range of items, including transportation equipment, industrial machinery, agricultural products and chemicals. This pattern may change somewhat in the future as Colombian development plans, reinforced by Andean Pact programs, gradually result in greater agricultural self-sufficiency, improved infrastructure, and domestic or Andean Pact production of a variety of finished products now being imported. When the Andean Pact regional sector assignments for the automotive and petrochemical industries are finally implemented, dividing up these industries among the six countries, there may be investment and export opportunities for U.S. firms.

The prospects for U.S. consumer goods exports are severely limited, due to protected local production. However, Colombia's large and growing urban population presents a good market for licensors of consumer products.

New foreign investment has been slow in recent years, as many investors took a "wait and see' attitude towards the government's application of the Andean Pact Foreign Investment Code, Decision 24. Foreign investment is welcomed within the framework of Decision 24, which the Colombian Government has been applying in a generally pragmatic fashion. The trend is towards requiring foreign investors to assume a 49 percent equity position, a requirement recently extended to the banking sector.

The United States has long been Colombia's main trading partner. In 1974, the United States accounted for 42 percent of Colombia's imports and bought 30 percent of its exports. U.S. direct investment in Colombia is valued at approximately $400 million. Currently the Colombian Government is negotiating with several U.S. firms for large investments in coal, nickel and natural gas, opening major sales opportunities.

The Colombian Government requires that foreign companies be represented by a local agent in order to bid on public projects. As bids normally must be presented within 30 to 60 days from opening of the tender, appointment of an agent at an early time is essential.

U.S. trade promotion activities this year include a pollution control trade mission, metalworking equipment catalog show, U.S. pavilion at the biennial Bogota International Fair, and promotion of attendance by Colombians at several industrial exhibitions in the United States.

FAIR TIME IN BOGOTA—*The biennial Bogota International Fair, one of the major trade events in the Western Hemisphere, will be held July 10-25 this year. More than one million visitors were drawn to the last Fair, shown above, held in 1974.*

Bahrain's Drive To Diversify Economy Expands Opportunities Outside Of Oil

Like most of its neighbors in the Gulf region, Bahrain has been enjoying an unprecedented economic boom in the past three years. Unlike its neighbors, however, Bahrain has experienced declining crude oil production during the past several years and, in the absence of new discoveries, reserves are expected to be exhausted in 15 years. The government has been responding to this prognosis with a vigorous campaign to promote other industries and services in order to diversify the economy. The result for American business is an increasingly wide range of opportunities for sales and investment in Bahrain, according to the U.S. Embassy in Manama.

Domestically there are two pressing economic problems on the Bahraini horizon: housing shortages and inflationtary trends. The government is publicly committed to a serious attack on both. Current plans call for about 2,000 middle and low-income housing units (roughly, $30,000-$50,000 each) to be built annually for the next decade. As much as $75 million each year is to be budgeted for this purpose. The second major problem, inflation, is more difficult for the government to control since Bahrain is almost totally dependent on imports. On some items considered of basic consumer interest (foodstuffs and some services, such as taxi fares), the government has begun to restrict profits and subsidize merchants to keep prices stable.

BAHRAIN LOOKS BEYOND OIL—*Declining production and reserves of petroleum is spurring interest in development of a broader base for the economy, but oil will remain the top industry for some time. Above, a Bahraini checks and records gauge pressure in a refinery unit.*

The construction industry is booming, continuing a trend which began soon after the 1973 rise in petroleum prices triggered the regional boom. Construction, of office and hotel space, high-cost private housing, and major public infrastructure projects such as port expansion, desalination and power plants, and a sewage system, is strikingly visible almost everywhere on the island. As a result, there is no unemployment and there has been an increasing need to import labor from other countries.

Bahrain's shortage of first-class hotel accommodations seems soon to be relieved. Opening of the Bahrain Hilton this year will touch off an explosion of American-managed hotels, including: Ramada Inn (1976), Sheraton (1977), Holiday Inn (1977-78) and Intercontinental (1978-79).

Two new major industries

Although in the absence of corporate and personal income taxes, 85 percent of the government's revenue still comes from oil, the economy has ceased to be narrowly based on oil. Since 1971, Aluminum Bahrain has been successfully exporting aluminum ingots produced from imported bauxite. A major dry dock project is expected to be fully operable by 1977-78. These two major industries, coupled with petroleum refining, are expected to make up the basic industrial units for the foreseeable future.

Tangential to this industrial diversification has been an effort pursued most effectively in 1975 to establish Bahrain's position as a regional banking center. International banks, including several American, have responded with enthusiasm to the Offshore Banking Unit program, which essentially hopes to establish an Arab money market (somewhat on the lines of Singapore's), and are rapidly opening offices in Bahrain. Coupled with the banking plan is the more traditional Bahraini role as regional servicing center for petroleum-related construction firms which, as often as not, have their main offices in Bahrain. Bahrain continues to be a Gulf, and to some extent Middle East, transportation center, with convenient air connections to most major world cities. Entrepot trade continues to contribute to the local economy and there has been some shifting of Middle East regional offices to Bahrain following Beirut's serious security problems.

Port delays continue to be one of the major constraints in economic development in the Gulf region. Bahrain's only port, Mina Sulman, has been experiencing delays similar but less severe than those being faced in other Gulf ports. Most of last year there was an approximately 20-day waiting period for ships intending to discharge their cargo in Bahrain. Imports for the local market include supplies for major infrastructural projects (cement, pipes, etc.), housing construction materials, foodstuffs, etc. There are currently six berths at the port; by 1979 there should be another six. Approximately one-third of the goods which pass through the port are destined for other Gulf states.

Trade with the United States continues to increase each year. In 1974, the United States was the chief supplier to Bahrain, accounting for 18 percent of Bahrain's imports, valued at about $80 million. In the first nine months of 1975 Bahrain imported more than $74 million worth of goods from the United States, although the United Kingdom appeared to have regained its traditional place as primary supplier. Automobiles, cigarettes, asphalt, pipes, gas turbines, heating and cooling equipment, pumps and related spare parts accounted for most of this total.

The rapidly expanding regional and local markets for consumer and capital goods present ample opportunities for aggressive American export promotion in Bahrain. Since, however, the United States is not a traditional supplier except to the petroleum industry, the construction boom has largely benefited British, Dutch, West German and now Korean firms. So far, few American firms have bid on, and none has won, important contracts in Bahrain.

Although American suppliers are still not fully price competitive in Bahrain, they enjoy a reputation for relative quality of product and, sometimes, for prompt delivery. These two factors are increasingly important considerations in major Bahrain purchases of goods and services.

Interested American business persons should visit the region, personally meeting local merchants and government officials concerned with future projects. Personal relations count for a great deal in the Arab world and American firms are often at a disadvantage in this regard in comparison with traditional suppliers. The Gulf region promises to be of long-term interest to American business; therefore, American companies obtaining initial contracts should make special efforts to perform well, for reputations, good and bad, travel fast in the area.

On the basis of U.S. Embassy reporting, the Department of Commerce can provide American companies with information on potential Bahraini business contacts as well as major export projects

and government tenders. The Embassy can supply interested business persons with information on local laws on foreign investment, commercial agencies and incorporation as well as local practices which are not codified. For those who visit Bahrain, the Embassy can facilitate initial contacts with key government officials as well as private merchants.

Key areas in which there appears to be scope for expanded trade with Bahrain include the following: heavy machinery, chemicals, building materials and equipment, automobiles, foodstuffs and materials handling equipment.

In recent years American firms have not responded to chances to participate in Bahrain's development. Recent major tenders, such as the dry dock construction ($138 million), received no American bids. Although it is not necessary to have a local agent in order to submit a bid, those awarded contracts are expected to make arrangements with a suitable local firm. Over the next few years, specific opportunities can be expected in the fields of housing and office construction, aluminum-related industries, water and sewage system expansion as well as power generation programs. A further major project, an 18-20 mile causeway which would link Bahrain with the eastern province of Saudi Arabia, is currently under study by both governments.

Certain investment incentives

Government policy is to encourage foreign investment. Recent legislation requires 51 percent Bahraini participation in local companies, with a few exceptions based on technological and developmental considerations. Certain incentives are offered by the government to private investors; there are no corporate or personal income taxes and no restrictions on convertibility or repatriation of capital and profits. There is a free port industrial area where investors can lease land on concessionary terms; currently full, it is to be expanded. Raw materials and products are exempt from customs duties if the resultant manufactured product is exported. Capital equipment is usually exempt from customs duties.

While Bahrain has begun to temper its enthusiasm for increased foreign investment because of the strains on local infrastructure following the post-1973 regional boom, there is continuing interest in promoting undertakings related to the two new major industries: the aluminum smelter and the dry dock. American business interests making sound proposals to participate in the growth of these sectors can expect a helpful response from both Bahraini business and Government.

Foreign investment is also welcome in another major area of interest, public housing. Planning is under way to launch a sizable public housing scheme later this year.

There is also local interest in joint ventures in dredging projects.

Location, relative ease of communication, social climate, government policies and relative availability of labor combine to make Bahrain a choice site for regional headquarters. Less rich than its neighbors, Bahrain is all the more enthusiastic about inviting participation in its economy by those in a position to contribute to its pursuit of social and economic development.

Chicago Trade Meeting Studies Transnationals

Secretary of Commerce Elliot L. Richardson, Eximbank Chairman Stephen M. DuBrul, Jr., and President Anastasio Somoza of Nicaragua are among the featured speakers at the 39th Chicago World Trade Conference to be held April 21-22.

The meeting, at the Hyatt Regency Chicago Hotel, will focus on the role of transnational companies in the international economy and conclude with a discussion on a proposed code of conduct for such companies.

Taiwan Gets On With Industrialization As Recovery Trend Gains Strength

Despite the fact that 1975 saw the Republic of China's two-way trade fall 10.7 percent below the 1974 total, the trend for the economy during the year was generally upward, according to Roderick N. Grant, Commercial Attache at the U.S. Embassy in Taipei. As the world economy improves and business activity picks up in the United States, Taiwan's chief market, prospects are good that the rising trend will continue during 1976 with corresponding opportunities for increased sales of a broad range of U.S. industrial products, supplies and services, and selected consumer goods.

The Republic of China's total trade in 1975 was U.S. $11.25 billion, a drop of $1.35 billion from 1974. With imports of $5.93 billion(c.i.f.) and exports of $5.32 billion (f.o.b.), Taiwan experienced a trade deficit of $610 million, an improvement over the $1.3 billion deficit recorded in 1974. Figures for January show trade in a substantial surplus position both on a customs basis and settlements basis. The foreign exchange reserve position of the Republic of China remains strong at $1.8 billion.

Japan continues to hold the largest single share of Taiwan's import market, with sales in 1975 of $1,801 million and a market share of 30.4 percent. Sales from the United States for the year were $1,649 million, 27.8 percent of total imports. Although imports from the United States dropped 1.8 percent during 1975 in value, the U.S. share of the market actually improved by 3.7 percent during the year.

The United States is Taiwan's largest foreign customer. Exports to the United States were $1.8 billion in 1975, a decrease of 1.8 percent from 1974, while Japanese purchases totaled $700 million. Together the United States and Japan make up 47 percent of Taiwan's total export sales.

Efforts to diversify foreign markets seem to be bearing fruit, as sales to secondary markets increased both in absolute and percentage terms during the past year.

The Republic of China's volume of foreign trade approaches the level of its GNP ($14.1 billion in 1975). Having few natural resources, the composition of its imports tends to reflect its exports, with the industrial equipment and supplies required for export industries making up a significant share of the total. Major categories of imports during 1975 included machinery and tools $1,056 million, crude oil $620 million, chemicals $611 million, electric and electronic supplies $535 million, basic metal $510 million, transportation equipment $443 million, and raw cotton and synthetic fiber $221 million.

Import results varied

Preliminary figures for 1975 indicate that the principal categories of purchases from the United States were agricultural products (excluding cotton) $408 million, machinery $348 million, electrical and electronic equipment and supplies $181 million, chemicals $148 million, textile materials (including cotton) $127 million, and metals $123 million. Although total imports from the United States were down, sectoral results varied considerably. Chemicals gained 62.9 percent, machinery 5.4, farm products 4.3, and textiles 2.4, while electronic equipment and supplies were down 21.3 percent and transportation equipment declined by 37.3 percent.

A development which should provide a sharp stimulus to Taiwan's exports to the United States in 1976 is the Generalized System of Preferences (GSP) authorized by the President under Title V of the Trade Act of 1974. The GSP pro-

vides duty-free treatment of eligible articles imported directly from designated-beneficiary developing countries. Of the 2,724 T.S.U.S. items composing the initial list of products eligible for duty-free entry under the GSP, Taiwan currently exports 864 and has the capability of producing many others. Officials of two American subsidiaries on Taiwan, producing hand tools and wooden novelty items, have stated that the tariff-free treatment which is now accorded their products will give them a significant competitive advantage, especially where the principal competition comes from non-beneficiary countries. Because of the cut-off provisions of the GSP its effect will be self-limiting, but may be expected to be considerable during the coming years.

Ten major projects

Of major significance to the continued growth of trade is the completion of the "Ten Major Projects." These are intended as a major step in the transition into an industrialized nation by 1980. Between 1964 and 1973 economic growth had been very rapid, averaging about 10 percent annually, and had largely outgrown the island's infrastructure—growth had outstripped power supplies; trade and travel had outgrown ports, rail facilities, roads and airports; and industry had to rely on imports of steel and petrochemicals to keep producing. To solve the problem the government initiated ten projects to bring the country's infrastructure in line with long-range growth needs. These projects, which will cost an estimated US$6.6 billion, include:

1. A north-south freeway from Keelung in the north to the industrial center of Kaohsiung in the south.

2. Electrification of the railway system between Keelung and Kaohsiung which will increase carrying capacity by one-third, reduce running time by one-third and cut energy consumption by one-half.

3. The Suao-Hualien railroad linking the east coast to the west coast rail system through the mountains; only 55 miles long, it will require 19 tunnels and 35 bridges.

4. A new international airport at Taoyuan southwest of Taipei to relieve the present congested Sungshan Airport northeast of Taipei.

5. Three nuclear plants and eight generators will increase the Taiwan Power Company's installed capacity from 4.35 million kilowatts in 1974 to 19.1 million kilowatts by 1985, of which 7.8 million will be from nuclear sources.

6. A petrochemical complex to reduce reliance on Japanese supplies, including a new oil refinery and four naphtha crackers for the Chinese Petroleum Corp. and a number of privately-owned downstream plants. The naphtha crackers are expected to produce 918,000 tons of ethylene, 492,000 tons of propylene and 100,000 tons of butadiene annually.

7. An integrated steel mill built by China Steel Corp. with the assistance of USS Engineers and Consultants, Inc., a subsidiary of U.S. Steel; the new mill will have an initial capacity of 1.5 million tons of iron and steel products, to be expanded to an eventual 6 million tons annually.

8. The China Shipbuilding Corp. shipyard in Kaohsiung, which will have capacity for 1.5 million tons of new ship construction a year and 2.5 million tons of repairs; the first 445,000-ton tanker is already under construction at this facility, which will accommodate ships up to one million tons.

9. A harbor in Taichung to help relieve port congestion; it will accommodate approximately three million tons of cargo when the first stage is completed this year, and will be expanded to reach 12 million tons by 1982.

10. Enlargement of Suao harbor on Taiwan's northeast coast to serve as an auxiliary for Keelung; the port is planned to take seven million tons of cargo by 1981 and will be able to handle 10,000-ton vessels via lighter and 5,000-ton ships at dockside.

Excellent sales opportunities

While many of the major purchases for these projects have already been made, the continuing industrialization of Taiwan which they presage should provide excellent opportunities for a wide variety of U.S. equipment, supplies and services. Information on trade leads developed from these and other projects on Taiwan are available through the U.S. Department of Commerce's Trade Opportunity Program.

The outlook for trade during the coming year will depend on the continuing recovery of the Chinese economy. Real GNP, which had been growing at a very rapid rate until 1974—averaging over 10 percent annually from 1964-1973—rose less than 1 percent during 1974 and recovered only moderately to 2.8 percent during 1975. According to estimates of government planners overall economic growth during 1976 should be 6.4 percent which includes an 8 percent rate for industry and a 3 percent growth in agriculture.

Internally the economy is sound and stable—during 1975 the wholesale price index actually fell 5.1 percent while consumer prices increased less than 5.2 percent. The one worry of local economists is growth of the money supply, considered excessive because it poses a threat to current stability. Achievement of the 1976 goals in industry depends on Taiwan's ability to maintain its market share with principal trading partners and to expand sales in other markets.

Products which appear to have especially good sales prospects during the coming months include:

Electronic production equipment—parts and accessories for diodes, rectifiers, transistors; integrated circuits and semiconductor devices; test instruments for electrical and electronic products; automatic IC assembly equipment; and semiconductor processing equipment.

Electronic components — capacitors, parts and accessories for electronic tubes, resistors, diodes, rectifiers, transistors, color TV picture tubes, LSI's, LED's and thyristors.

Computers and related equipment—storage devices and random access for electronic computers; parts and accessories for basic electronic computer devices; remote terminals; minicomputers; and micro-computers.

Food processing and packaging equipment—refrigerating units, centrifugal, hermetic-type.

Air and water purification and pollution control equipment—water purifying machines and parts, heat exchangers, machinery and parts for treating materials by temperature changing, desulphurization equipment, electrostatic precipitators, and odor control equipment (or materials).

Energy systems—valves, non-automatic; cocks, fittings and parts of nonferrous metal; generation equipment, diesel, 100-1000 kw; transmission equipment, high temperature tolerance; and flow and proportional mix pumps.

Metalworking and finishing equipment—copying lathes, automatic lathes, lathes for watchmakers, grinding machines (including surface), drilling machines, milling machines, boring machines, saws, planer, internal grinders; machine tools for working metal or metallic carbides, special dies, tools, and jigs and fixtures.

Building and construction equipment—road rollers; excavating and boring machinery; mineral crushing, mixing, sorting, screening machinery; lifting, handling, loading or unloading, conveying machinery; fork lift trucks and other work trucks; asbestos, cement building products; precast and prestressed concrete production machinery; adhesives, sealants, caulking, water proofing compounds; wallpaper; fabricated metal; fabricated structural steel.

While many U.S. consumer goods are priced out of the market because of very high tariffs and/or competition from inexpensive local products, certain items appear to have good sales prospects according to Chinese retailers. Examples include towels, bed linen, silver-plated flatware, children's items (except clothing), power lawn mowers, gardening tools, carpets and glassware.

Ecuador Booms In Face Of Dip In Oil Earnings

Despite reduced levels of petroleum production and exports during the first half of 1975, the Ecuadorean economy generally continued to boom throughout the year, with gross domestic product rising impressively by an estimated 6.6 percent in real terms. However, the drop in oil export earnings through mid-1975 has left its mark on the economy: during the year as a whole, the country's net gold and foreign exchange reserves fell by about one-third, and some crimps remain in the budgets of the central government and of the numerous quasi-governmental agencies that also share the oil export earnings.

Since the last quarter of 1975, continues the U.S. Embassy in Quito, petroleum production and exports have been resumed at steady and rewarding levels that seem sustainable through 1976. Ecuador's balance of payments should also be helped by import curbs that have been in force since September on a wide variety of goods, designed to dampen an import boom that continued unabated even after the oil boom receded starting in mid-1974. Imports soared some 40 percent in 1973 and 80 percent in 1974. During the first half of 1975, while export earnings plummeted 40 percent below the first half of 1974, imports rose by 66 percent. The government imposed a ban on imports of automobiles and light pick-up trucks, effective June 1, and in August imposed severe duty surcharges on a broad array of imports. The latter measure touched off widespread vehement protests, which to some extent triggered the unsuccessful coup attempt of Sept. 1. In mid-September, the government rescinded the surcharge on certain imports deemed essential, and lowered the surcharge on the other affected imports but imposed for these a requirement for prior import deposits.

Latest available data indicate that these curbs had not yet much retarded actual imports; however, they strongly retarded the number and value of import licenses issued during late 1975, presaging a downturn in actual imports during early 1976 as compared with early 1975.

The coming downturn is expected to be registered mainly in consumer goods. Most other categories of imports are expected to continue growing, especially those that are largely exempted from the import curbs: construction materials, capital goods for industries, and raw materials for agriculture. Moreover, because of price increases, import payments in 1976 as a whole will probably total even more than in 1975 even if the import curbs are maintained throughout 1976.

U.S. exports to Ecuador are estimated to have increased by over 40 percent in 1975 as compared with the previous year, making Ecuador one of the top ten markets for U.S. export sales in all of Latin America and the Caribbean. The U.S. share of the fast-growing Ecuadorean market has been gaining strongly in recent years, from 30 percent in 1972 to an estimated 38 percent in 1975. Even with the anticipated deceleration of the growth of Ecuador's imports in 1976, the market should remain exceptionally attractive for U.S. exporters.

In 1976 the Ecuadorean market will offer good opportunities to U.S. suppliers of capital goods, raw materials, construction materials and a wide variety of technical services. Government entities will continue issuing public tenders for design, construction and equipment needs for large electrification, irrigation and telecommunications projects. Tenders may also be announced for equipment to modernize or expand several ports and airports as well as the country's railway system. There will also be opportunities for increased sales of road construction equipment. The government may also proceed with plans to contract for the construction of a munitions factory and a shipyard. Although agricultural tractor purchases are likely to be reduced, the market for most other agricultural equipment should remain active. As the building boom continues, U.S. exporters will also find a continuing private market for various construction machinery and supplies.

In the face of the government's credit squeeze on Ecuadorean importers and the import duty surcharges and advance deposit requirements, U.S. exporters will find it increasingly necessary and worthwhile to offer relatively generous payment terms to their Ecuadorean customers. So long as the import curbs remain in force—which is likely to be through most if not all of 1976—many Ecuadorean purchasers will buy from the supplier who offers the best payment terms rather than the supplier who offers the best price.

Ecuador is now entering the planning stage for a number of sizable new investment projects. Although most of these are in the public sector, the government is looking mainly to domestic and foreign private investors to supply the required capital.

Particularly noteworthy is the petrochemicals sector, for which Ecuador has received assignments under the Andean Pact for the development of an enormous complex during the late 1970s. While some knowledgeable observers believe there is not much likelihood that such a complex could be realized as fully as hoped, there is likely to be much activity in this sector in coming years. Similarly, the Andean Pact's assignments to Ecuador in the automotive sector may generate large investment activity.

The Minister of Industries and the Minister of Finance in recent months have initiated a number of measures to encourage and facilitate foreign private investment in Ecuador. At the same time, the U.S. Government is resuming its offers of assistance through the Overseas Private Investment Corporation (OPIC) to U.S. investors interested in undertaking ventures in Ecuador. OPIC has decided to renew its incentives for stimulating U.S. private investment in Ecuador. The incentives—such as direct financial assistance to U.S. investors, insurance against inconvertibility, and political risk insurance—had been suspended since 1971 for projects in any of the Andean countries, principally because OPIC deemed certain provisions of the Andean Pact to be incompatible with OPIC requirements regarding insurance against political risks. Since it is only the latter kind of assistance that is affected by the Andean Code, OPIC has decided to resume offering its other kinds of assistance, and has declared its intent to offer political risk insurance for projects for which the Government of Ecuador agrees to some mutually acceptable arrangement for handling disputes.

U.S. EXHIBIT, GUAYAQUIL—*At fourth International Fair of Ecuador last fall, 60 U.S. firms displayed consumer goods, farm equipment, earthmovers, power generation equipment, automotive items. Participants reported $390,000 in sales, projected 12-month orders of $17 million. Best-stand award went to Conauto booth.*

Guatemala, Economic Base Intact, Set For Quick Recovery From Quake

The short-term outlook for Guatemala's economy is still good, reports Commercial Attache Ralph D. Griffin from the U.S. Embassy there, despite the tremendous loss of life and destruction of hundreds of thousands of houses by the earthquake of Feb. 4.

This unparalleled natural disaster occurred at a time when the Guatemalan economy, the strongest in Central America, was emerging from a two-year slump, foreign reserves were at an all-time high, and tourism was booming. Griffin's view is that the economy has been stunned, but not critically hurt, and recovery should be under way in a matter of months. Overall commercial imports of U.S. goods will probably decline temporarily from expected levels, but some items will increase greatly, most notably building materials.

The reason for Griffin's relative optimism is that the key agricultural area of the Pacific Coast and littoral, where most of the country's coffee, cane, cotton and cattle is grown and which accounts for most of the nation's wealth, was untouched. Most industry is located in the capital, and suffered only minor damage.

The most serious short-term problem is the damage to the main highway to the Caribbean, and to a lesser extent the rail line. These two routes carry most of Guatemala's imports and much of its exports to and from the twin ports of Santo Tomas de Castilla and Puerto Barrios. Circuitous alternative roads are open to the Caribbean and transport costs have soared. However, the railway line has been reopened for freight, and a U.S. engineering group has arrived in a concerted effort to open the main highway before the beginning of the rainy season in mid-May. Puerto Barrios has lost its pier, but Santo Tomas should be able to handle most of its cargo.

Meanwhile, the Pacific ports of San José and Champerico are functioning normally, and the Honduran and Salvadoran ports of Puerto Cortés and Acajutla are available alternatives. Thus Guatemala's traditional exports, on which it relies for most of its foreign exchange, are in good shape, although there will undoubtedly be some shipping delays.

The one important area of the economy for which the outlook, at least for the rest of 1976, is bleak, is tourism. But here the reasons are probably more psychological than structural. All the first-class hotels in Guatemala City were damaged but only one so seriously as to close for repairs. The remainder are open on a limited scale. Most should be fully repaired in three or four months.

The central business district and most of the commercial offices of Guatemala City are basically intact and financial problems caused by property damage or loss of records should not be too serious. What effect then will the earthquake have on imports? While it is still too early to judge with much certainty, Griffin estimates that initially importers will slow and in some cases cancel orders for shipments while they assess the new market conditions. This will be particularly true of luxuries and non-essentials.

Firms in areas directly related to the reconstruction effort, especially building materials, supplies and equipment, will be importing much more. Expect a building boom, although except for repairs to better-built structures such as offices, tall buildings and factories, much of it will be confined to reconstructing the simple dwellings of lower income groups, whose houses were most heavily damaged. This should create a tremendous market for roofing, cement blocks, plaster, glass and reinforced steel bars.

In fact, the rapid expansion of credit and the extending of loans could create something of a small boom, possibly rekindling inflation. There will also be an increase in the building of luxury homes to offset the now vacated high-rise apartments. Indications are that most promoters of industrial projects already begun are going ahead with construction plans. Although government resources will be heavily diverted to the immediate needs of relief and reconstruction, major infrastructure projects will go forward. At the head of the list is power development. Work on the Aguacapa and Chixoy hydroelectric dam and Moyuta geothermal project continues. A total of $300 million is to be spent on these projects.

Efforts to upgrade Guatemala's Caribbean and Pacific ports will continue, probably with more urgency than ever.

The national railroad, which was interested in buying locomotives and rolling stock and replacing much of its track, will be busy getting its line to the Caribbean open. Once that it is done, it will need to upgrade its equipment more urgently than ever, especially if the railroad is restored to full capacity sooner than the highway. It would then become the key route to the Caribbean.

Although bidding for most of the $26 million in equipment to be used in the 1976-78 phase of expansion of the Guatemalan national telephone system is due to be completed by March, plans are to spend at least as much in 1978-81. In addition, a sizable investment will have to be made to replace telephone lines and other equipment destroyed by the quake.

On the agricultural side, expect continued good sales of agricultural equipment, although at a somewhat slower pace than last year. Efforts to diversify, package and export new crops on a commercial scale in Guatemala will continue, and markets for processing equipment for palm oil, certain nuts and various vegetables seem assured.

In sum, problems exist over the short-term that will slow the flow of exports, reduce imports temporarily, and drastically lower tourist earnings, but these difficulties may be overcome by mid-year. There will be numerous opportunities for U.S. business to supply materials and tools for Guatemala to help it rebuild, recover and ultimately resume its steady pace of economic growth.

Calendar For World Traders

April 13—Worcester, Mass.—Workshop on international marketing. Sponsors: Small Business Administration, Chamber of Commerce, Boston Commerce District Office. A second workshop on April 20 will consider international finance and marine insurance.

April 21-22—Ann Arbor—Seminar titled Handling Financial Aspects of Foreign Trade. Sponsor: Univ. of Michigan, Graduate School of Business Administration. For information, 313-763-1387.

April 22 — Rochester — Latin American trade seminar, Inn On the Campus. For information, William Freiert, 716-454-2220.

April 22-23—Los Angeles — Seminar on Technology Marketing: An Answer to Business Growth, Century Plaza. Sponsors: Institute for Advanced Technology, Worldtech. For information, 612-853-5820.

April 22-23—Savannah—Commerce District Office seminar on Doing Business with the Middle East. Speakers include Commerce's John Haldane.

April 28-30 — New York — Legal and Financial Aspects of Exporting and Importing, World Trade Institute.

May 3-4—New York—Seminar for U.S. exporters on European product codes and standards, Roosevelt Hotel. Sponsors: Technical Help to Exporters (British Standards Institute), NTIS. For information, 703-321-8500.

May 3-4—Los Angeles—Practising Law Institute program on Regulation of Foreign Investments in the United States, Century Plaza. Will be repeated May 24-25 at the New York Sheraton.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about upcoming trade exhibits and trade missions, licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, and details on major construction and expansion projects.

U.S. Promotions Abroad

For more facts on these and other U.S. exhibitions write: Director, Office of International Marketing, Rm. 4015, U.S. Department of Commerce, Washington, D.C. 20230. For trade missions: Rm. 6051, U.S. Department of Commerce, Washington, D.C. 20230.

Health Care and Biomedical Technical Sales Seminar. Belgium and Spain. May 23-June 4. Seminar sessions will be conducted in Brussels, Madrid and Barcelona, with an optional visit scheduled to the University Hospital in Ghent. The seminar will cover a broad range of items in the health care and biomedical equipment fields. Emphasis will be on advanced equipment and complete systems utilized in well functioning hospitals, clinics and research laboratories. Product categories to be included are: cardiological; respiratory-pulmonary; pediatric; nephritic; operating room equipment; general hospital, clinical and research laboratory equipment. The economic conditions and long term trend toward increased and modernized health care delivery systems, both public and private, are very favorable for the seminar. Donald N. Sliwicki, 202-377-5285.

Clean Air and Water Exhibition. U.S. Trade Center, Sydney. May 31-June 4. The Australian pollution control market, currently valued at $85 million, is expected to grow at a rate of 9 percent. The U.S. accounts for 40 percent of the import market, which is expected to grow at a rate of 7 percent. John Klinglehut, 202-377-4957.

Railroad Equipment (JEEP). U.S. Trade Center, Mexico City. June 1-3. The Government of Mexico is in the process of modernizing and expanding its railroad system, at an estimated cost over the next four years, for equipment alone, in excess of $400 million. The recognized high quality of U.S.-produced railroad equipment places U.S. firms in a favorable position to take advantage of the numerous sales opportunities which will result from this expansion. David M. Hill, 202-377-3636.

Nuclear Instruments, Accessories, and Medical Equipment Exhibit. U.S. Trade Center, Tokyo. June 7-11. The market for nuclear instruments and accessories has grown steadily in Japan during the past decade. In 1974, the Japanese market reached $484.6 million of which $96.7 million was imported with the United States as the major supplier. By 1979 the market should reach almost $951 million, $175.5 million of which will be imported. In addition, the Japanese market for biomedical equipment of which nuclear medical instruments are a part has been increasing at an average annual rate of 21 percent and should reach over $975 million by 1977. Mara Yachnin, 202-377-5751.

Marine, Port and Shipyard Equipment Catalog Exhibit. Piraeus, Greece. June 7-12. In connection with "Posidonia 76." Will feature catalogs from U.S. companies that want to take advantage of the dynamic shipping industry growth now taking place in the Mediterranean as a result of the Suez Canal opening. The Posidonia Shipping Exhibition, held every two years, attracts the world's leading shipbuilders and shipowners, as well as many marine machinery and equipment manufacturers. Greek shipowners are spending over $7 billion annually to cover the cost of modernizing, operating and maintaining the Greek merchant fleet, and Greek ports are expanding to meet burgeoning demands. Greece's shipbuilding and repair industry continues to expand steadily, with repair facilities alone handling 6 million dwt annually. Projects of $150 million have received government approval and another for $50 million is pending. Call Robert E. Peterson, 202-377-3973.

Industrial and Commercial Security Equipment Exbn. U.S. Trade Center, Paris. June 8-11. France is an important and growing market for security equipment. In a very successful exhibition on this theme held at the U.S. Trade Center in September, exhibitors projected $7 million of sales over a 12-month period. Products to be exhibited include fire prevention and extinction equipment, burglary and pilferage detection and prevention, and communication systems and access controls. Lars Lofas, 202-377-4941.

U.S. Food Processing and Packaging Equipment Catalog Exhibit. Brazil and Argentina. June 9-23. Brazilian imports of food processing machinery totaled $17 million in 1974, and are expected to reach $26 million in 1978. Predictions are that the U.S. share of this market will grow from $3.4 million in 1974 to $5.2 million in 1978. Brazilian imports of food packaging machinery made in the United States amounted to $5.4 million in 1974 and are expected to exceed $11 million in 1978. It is anticipated that Argentine demand for imported food processing equipment will remain steady at about $25 million over the next three years and will consist of highly specialized lines and parts of components. U.S. suppliers should consider licensing agreements with local manufacturers whereby the U.S. company provides technology and critical components, since the market will be closed to foreign suppliers of finished products where domestic manufacturing capability exists. Robert E. Peterson, 202-377-3973.

BROAD/COMM '76 (Exbn. of Professional Broadcasting and Communications Equipment). U.S. Trade Center, Mexico City. June 14-18. Mexico's need for radio/TV, broadcast and communications equipment presents an excellent market for U.S. manufacturers. There is overwhelming preference for U.S. equipment in the fields of fixed and mobile two-way radio, CCTV, facsimile, repair, maintenance and calibration instrumentation, signalling systems for industry and more. Space limited. Mary R. Wiening, 202-377-4463.

Building and Construction Machinery Equipment Catalog Exhibit. Ecuador and Peru. June 14-25. Both nations are undertaking a wide variety of economic development projects which call for substantial investments and require large amounts of construction equipment and supplies. These projects involve irrigation, oil pipeline construction, highway construction and housing and office building construction. With certain minor exceptions most of this equipment must be imported. Spurred by petroleum exports, Ecuador's imports have risen to nearly $1 billion while imports into Peru have gone to nearly $2 billion because of rapid governmental growth in a wide variety of economic sectors. Robert E. Peterson, 202-377-3973.

Health Care Industries, Equipment and Instruments Exbn. U.S. Trade Center, Tehran. June 20-24. The Government of Iran continues to give high priority to programs in the health care field. Medical care is one area which has not suffered major reductions due to budget restrictions imposed during the past six months. Imports of medical equipment and supplies increased from $98 million in 1972 to $300 million in 1974. This trend is expected to continue since Iranian manufacturing in the field is limited to pharmaceuticals. Karl S. Reiner, 202-377-2952.

Plastic Processing Machinery and Plastic Materials (PLAST 76). Milan. June 20-26. American manufacturers of plastics processing machinery and equipment and materials can significantly increase their share of what promises to be a more than $40 million import market in Italy in 1976. U.S. technology in this field is highly regarded, and buyers are interested in the latest available types of cost/labor saving equipment. PLAST 76 is one of the world's largest international exhibitions of plastics and will be the major international promotion in this field in 1976. It provides U.S. manufacturers one of the best bridges available to reach both the established markets of Europe and the rapidly developing markets of the Middle East and North Africa. Over 180,000 visitors from approximately 50 countries are expected to visit the exhibition. Jerry Morse, 202-377-3957.

AMOFFICE TECH Seminar. Nigeria. June 20-30. Technical sales seminar on American office technology designed to reach educators, administrators and man-

agers of this oil-based, $6 billion import market. Nine U.S. suppliers of office machines, and business, computer, education and security-related equipment will exchange innovative techniques for expediting management, administration and paperwork with a prequalified group of purchasers from Nigeria and adjacent markets. Hand-held and limited demonstrator equipment may be accommodated. Rod Rydlun, 202-377-4564.

Automotive Test, Service and Repair Equipment. U.S. Trade Center, Sydney. June 21-25. The Australian market for automotive test, service and repair equipment is estimated at $145 million. Imports in 1973-74 were valued at $55 million with the U.S. accounting for 31 percent of this import market sector. Demand for this equipment will increase as service and repair organizations invest in new equipment. Due to the economies of short production runs and high manufacturing costs, domestic products are overpriced and the import sector is expected to increase. Dana Marshall, 202-377-2385.

Machine Tools, Metalworking and Shipbuilding Exhibition. Bilbao, Spain. June 21-26. Spain is expecting to achieve a 3 percent rise in GNP in 1976, partly due to its expanding metalworking-finishing industries, where the current import market is estimated at some $90 million. Included are the more advanced classes of electrical-discharge and electro-chemical machines, numerical and computer-controlled machines, and all classes of multiple operation and automatic and semi-automatic machines. Local manufacturers are now looking for large automated equipment which is superior to European equipment; flexibility and productive capacity are more important than price. Roger Turner, 202-377-3957.

Metalworking & Finishing Equipment Exhibition & Seminar. U.S. Regional Trade Center, Singapore. June 22-25. This market in Singapore has been expanding rapidly in response to increased demand from the shipbuilding industry, offshore oil firms and other industrial enterprises. In 1974, market consumption was estimated at some $82.4 million. By 1978 this figure is expected to reach $161.5 million. Space limited. Call J. Lee Barnes, 202-377-3893.

Noise and Vibration Control and Analysis Exhibition. U.S. Trade Center, Frankfurt. June 22-25. The German market for noise control equipment currently amounts to about $10 million a year. This market sector will enjoy an annual growth rate of at least 20 percent during the next 3 years. However, vibration equipment in Germany is considered to still be in its infancy. U.S. manufacturers with new technology or equipment will find exceptionally good sales opportunities. Loretta Allison, 202-377-3748.

Agricultural Equipment and Supplies Catalog Exhibit. Sierra Leone, Kenya and Zambia. June 23-July 3. Will feature full range of agricultural equipment, chemicals and supplies associated with production of various crops. Included are fertilizers and insecticides, agricultural handtools, grain elevators and crop storage facilities, mobile and stationary irrigation equipment as well as farm implements. The Government of Kenya has a development plan for the agricultural sector, and international lending organizations are considering authorizing funds for expansion of production of cotton, maize, sugar, groundnuts, coffee, sunflower and pulses. Zambian priorities include production of vegetables and fruits, vegetable oil crops, beef, pork and poultry meats and hides and skins. Investment in Sierra Leone's farming development will total $98 million during the 1974-79 plan period. In addition to cash crops such as coffee, cocoa, palm kernels, ginger and piassava, new crops such as onions, rubber, sugar cane and coconut will be put into production. Call Robert E. Peterson, 202-377-3973.

Furniture and Furnishings Exbn. U.S. Trade Center, London. June 28-July 2. Significant opportunities exist in 1976 for U.S. manufacturers to export furniture and furnishings to the United Kingdom. U.S. exports of household furniture to Britain increased from $308,000 in 1971 to $2.6 million in 1975, a gain of 735 percent. Substantial gains are anticipated over the next several years as British interest in U.S. furniture continues to mount. A large prestige furniture retailer in London completed a highly successful promotion of American furniture last fall and a leading British housewares manufacturer is scheduled to begin importing and distributing U.S. furniture in early 1976. American furniture will be featured in the Home of the Year at the Ideal Home Exhibition in London in March. Participation in the U.S. Trade Center show in June should enable U.S. furniture producers to catch the British market at an ideal time. Robert Bradshaw, 202-377-4461.

Electronics Industry Production and Test Equipment Exhibition. U.S. Trade Center, Taipei. June 28-July 2. The highly developed and once again expanding electronics industry in Taiwan seeks the most up-to-date electronics production and test equipment. This exhibition will feature a broad range of production, test, assembly and quality control instrumentation and equipment. Most of the 900 plus electronics firms in Taiwan are oriented toward the U.S. market and exhibitors at this event will find large numbers of buyers already attuned to American production techniques. Space is limited. Dave Horridge, 202-377-2798.

USAQUIP '76. Exhibition of Materials Handling Equipment, Building Supplies and Equipment and Packaging Machinery. Kuala Lumpur, Malaysia. June 28-July 3. With a 2 percent growth in GNP recorded last year, Malaysia is set to expand again as the world comes out of its slump. With $1.3-1.5 billion in gold, foreign exchange and net external reserves, plus a sound currency and 7 percent inflation rate in 1975, Malaysia offers the best in business opportunities in Southeast Asia. Growth in this market is expected to be 6-8 percent annually in the next few years. Hal Bromel, 202-377-3011.

Educational Training Aids Catalog Exhibit. Philippines, Korea, Republic of China. June 30-July 14. Technical competence at advanced levels is being given top priority in the educational systems of these Far Eastern countries. Although competition exists from Japanese suppliers, American manufacturers of audio-visual equipment, printed matter, training kits and classroom laboratory apparatus can find customers. Government funding emphasis will be in such areas as industrial training, agricultural colleges, high schools, scientific and vocational training schools, hospitals, business schools, libraries and other public educational institutions. Robert E. Peterson, 202-377-3973.

U.S. Pavilion in 1976 Bogota Int'l Fair. July 10-25. The 1974 U.S. Pavilion attracted more than one million visitors; expectations were greatly exceeded with reported off-the-floor U.S. sales of $4.2 million and anticipated 12-month sales of $18 million. Products to be exhibited range in variety from tractor trucks to mini and desk calculators. Products exhibiting highest sales potential are in the areas of food processing and packaging equipment, agricultural machinery and equipment, business equipment and systems, metalworking and finishing equipment, industrial instrumentation, materials handling equipment, printing and graphic arts equipment, textile machinery and general industrial equipment. Further information is available from the U.S. Embassy in Bogota; contact Stephen R. Gibson, Commercial Attache, APO New York 09895.

Electronic Components & Materials Exbn. U.S. Trade Center, Tokyo. July 12-16. Latest market research indicates that the 1977 electronic components market in Japan will be approximately $3.6 billion, of which imports will total $684 million. The U.S. share is estimated at 60-75 percent, some $410-$513 million. The increased demand for more technologically sophisticated components and the Japanese Government's removal of import restrictions on integrated circuits provide additional inducements to expand exports to this growing market. Cantwell Walsh, 202-377-4056.

23rd Damascus Int'l Fair. July 25-Aug. 20. Syrian imports from the United States during the 1974-75 period grew more than 350 percent, from $36 million annually to $127 million. In addition, Syria is now entering its Fourth Economic Development Plan, which has budgeted approximately $20 billion for expansion in four major categories, agriculture, construction and mining, dam projects, and road construction. Complete details can be obtained from Roderick M. Wright, Economic/Commercial Officer, American Embassy, Damascus. General information available from W. Bradley Tyrrell, 202-377-4304.

U.S. Consumer Goods Catalog Exhibit. Lagos. July 26-30. Nigeria's oil boom has stimulated every sector of the country's economy. Demand for consumer goods, including apparel, textiles, housewares and domestic appliances, tools and hardware, electronic goods and pharmaceuticals has exceeded all expectations in recent years. In 1974, imports of these items were estimated at close to $300 million. Over the next five years, imports of consumer goods are expected to grow at an annual average rate of 10-15 percent. Half of Nigerian demand for textiles is supplied domestically, but Nigeria is totally dependent on imports for most other consumer goods. Increased demand for quality products as well as present shortages of these items should increase the U.S. competitive position substantially. Robert E. Peterson, 202-377-3973.

Commercial Fisheries Trade Mission to Thailand and Malaysia. Aug. 16-27. Both countries have announced ambitious plans for modernizing and expanding their fishing industry, and expect international bank financing to assist. Trade opportunities particularly exist for large fishing trawlers, navigation guidance equipment, refrigerators, cold-storage

facilities and trucks, high-power engines, ice-producing machines, fish processing machinery and packaging machinery. E. Lee Carteron, 202-377-2973.

Metallurgical Equipment and Instrumentation. Mexico City Trade Center. Aug. 23-27. As rapid growth of steel production is one of Mexico's primary developmental goals, vast investments in the iron and steel industry continue unabated. In addition, considerable outlays are being made to increase Mexico's aluminum and copper-making capabilities. Such expansion programs, relying heavily on imported equipment and expertise, offer considerable sales potential for U.S. suppliers. Contact Anita F. Brownstein, 202-377-4463.

Business Equipment Catalog Exhibit. Ghana and Swaziland. Aug. 23-27. Will focus on a broad range of business and computer-related equipment for business firms, government departments, banking and other financial organizations, universities, and other educational institutions. Business equipment will be imported by both Ghana and Swaziland in increasing quantities to meet growing demand from industries and institutions in public and private sectors. The increasing volume of financial transactions and a trend toward more sophisticated equipment in both markets indicates that complete computer systems will be installed by some of the targeted end-users. Robert E. Peterson, 202-377-3973.

Interbymash Municipal Service and Domestic Equipment Trade Fair. Moscow. Sept. 1-15. Rapid urbanization and industrialization has created an enormous demand for municipal and communal services. Preparations for the 1980 Olympics assure further growth in demand. Will feature: water supply, sewage systems, electric power systems, gas supply and gas appliances, sanitary equipment, laundry and dry cleaning machinery, hotel equipment, barber shop and beauty parlor facilities, public transport and city road maintenance, and equipment for repair of electric apliances. Ralph S. Edwards, 202-377-2801.

Construction Techniques and Chemical Processes, U.S. Exbn. at 32nd Plovdiv Int'l Fair. Sept. 3-10. The chemical industry is Bulgaria's fastest growing sector. Heavy chemicals and petrochemicals will both receive strong emphasis under the Seventh Five-Year Plan (1976-80), with one-third of capital investments slated for modernization. By 1990, output in this sector is expected to increase five-fold. Bulgarian officials have expressed strong interest in participation of U.S. firms in development of this industry. Bulgaria is planning several large construction projects and will need latest equipment and technology to realize its plans. Call William Monroe or Gary Roberson, 202-377-4810.

Farnborough Air Show and Flying Display. Farnborough, England. Sept. 5-12. With the market for avionics equipment in the United Kingdom expected to total $196.8 million by 1978, American aerospace firms can anticipate another successful showing at this prestigious international show. In 1974, firms which exhibited in the U.S. section reported $3.7 million in off-the-floor sales. Best sales prospects include: VHF communications and navigation equipment, inertial platforms, airborne weather/ground-mapping radar, passenger bridges, rapid intervention, vehicles, ground power units, cargo loaders, air starters, etc. The Federal Aviation Administration will be represented with a major display highlighting the U.S. National Aviation System. Beryl D. Cohen, 202-377-4961.

Do-It-Yourself Exbn. U.S. Trade Center, Tokyo. Sept. 6-10. Inflation, tight money, and the growing cost of services related to home rehabilitation, repairs, and maintenance as well as a renewed interest in personal creativity are encouraging growth in the do-it-yourself field. The market, $204 million in 1974, is projected at $505 million for 1978. This exhibition will display home/entertainment/garden do-it-yourself products and will include demonstrations by participating firms. Call 202-377-2426.

U.S. Exhibition in Aquatech '76. Amsterdam. Sept. 14-18. This prestigious exposition, expected to draw 40,000 visitors from around the world, is an excellent opportunity for U.S. firms in the water equipment industry to enter into or gain increased sales in the rapidly growing European market. In 1975, an estimated $650 million was spent on water purification and pollution control equipment alone in the Netherlands, Belgium, France and Germany. Due to implementation of stringent legislation and rising concern over water quality, investment in equipment in this field is expected to exceed $2.6 billion during the 1976-78 period. George Ruffner, 202-377-4941.

Materials Handling Equipment. Brno '76 Engineering Fair. Sept. 15-23. The Czechs are looking for labor-saving materials handling equipment. U.S. manufacturers of advanced equipment could realize immediate sales and/or develop valuable contacts. By 1977, the U.S. share of such imports could be $4-6 million. Established and new-to-market firms can develop a strong foothold in a promising growth market. Anatole Bilecky, 202-377-2801.

Process Control Instrumentation Exhibition. U.S. Trade Center, Taipei. Sept. 20-24. The market for process control instrumentation in the Republic of China is growing at a strong pace. Purchases are expected to reach $15 million by 1978, double the level of 1973. U.S. manufacturers are expected to supply about one-third of this market, which is concentrated in the petroleum, coke, coal, utilities, services, chemical processing and primary metals industries. Michael Schneider, 202-377-2215.

Food Processing and Packaging Equipment Exhibition. Caracas. Sept. 20-25. The U.S. has a 50 percent share of the Venezuelan market for food and beverage processing and packaging equipment, estimated at $113 million in 1975. Demand growth of 10 percent annually is expected through 1979. This event is designed to take advantage of Venezuela's quest for self-sufficiency in food, as the government programs surplus oil revenues into agriculture and industry. A full range of processing; forming, filling and sealing; wrapping and packaging; marking and inspecting; and container/product/package handling equipment is required for all types and phases of the industry. Thomas L. Thomas, 202-377-4230.

In-Store Promotion. Taby, Sweden. Sept. 23-Oct. 2. Taby Centrum, a large shopping center located 12 km. north of the center of Stockholm, will stage the first in-store promotion held in a shopping center. Over 35 stores will participate in this Bicentennial theme promotion, including the Domus and Nordiska Kompaniet (NK) department stores, numerous apparel specialty shops, and jewelry, gift and appliance stores. Interested suppliers contact Theodor Rumme, Asst. Commercial Attache, U.S. Embassy, Strandvagen 101, Stockholm. List of store names and contact persons available from Charles E. Johnson, 202-377-4705.

SPOGA 76 — Sporting and Camping Equipment. Cologne, Germany. Sept. 25-27. Considered by most manufacturers as the world's major international exhibition for sporting and camping equipment. SPOGA 75 hosted more than 1,400 exhibitors from 35 countries and, in only three days, attracted 30,000 trade visitors from 71 countries. Commerce's pavilion will accommodate 30 U.S. manufacturers of appropriate equipment. Robert Wallace, 202-377-3748.

Packaging and Bottling Equipment Exhibition. U.S. Trade Center, London. Sept. 27-Oct. 1. The United Kingdom imported $81.3 million (c.i.f.) worth of bottling and packaging machinery in 1975. The United States supplied 20.8 percent of the market, a share that expanded by 4.3 percent over 1974, reducing the West German lead from 16.4 to 7.5 percent. While Britain represented 4.2 percent of the entire world market for all U.S. exports in 1975 (f.o.b.), it took 8.6 percent of U.S. exports of packaging machinery. This exhibition of U.S. canning, wrapping, packaging, bottling, filling and sealing machines, equipment, and accessories will be directed to end-user trade audiences in both the United Kingdom and Republic of Ireland. Commission agents and distributors seeking exclusive representation agreements for both countries will also be in attendance. Craig S. Atkins, 202-377-2881.

In-Store Promotion. Edinburgh. October. Jenners, the prestige retail outlet of Edinburgh, Scotland, will feature a U.S. Bicentennial promotion for two weeks. Product categories of interest include all types of apparel, fabrics, linens, housewares and furniture. Store contact: Mr. J. McDermott, Jenners, 48 Princes St., Edinburgh EH2 2YJ. U.S. buying office: Affiliated Traders Ltd., Attn. Miss Aeta Salba, 220 Fifth Ave., New York, N.Y. 10001. Mollie Cleveland, 202-377-4705.

Business Systems Exhibition. Tehran Trade Center. Oct. 10-14. Iran is the fastest growing market for U.S. exports in the world. Over the last two years, our exports to Iran quadrupled to $3.2 billion. Much of Iran's approximate $20 billion oil income goes to industrial and business growth. This force-feeding of economic growth offers excellent sales opportunities for American suppliers of computers and business equipment. Within three years the Iranian import market for business systems will amount to $63.5 million. Don Ryan, 202-377-2952.

In-Store Promotion. Shalom Stores Ltd., Tel Aviv. Oct. 10-31. Shalom is planning a major Bicentennial promotion of U.S. consumer products. U.S. buying office is Marcent Int'l. Inc., Attn. Kurt J. Heilbronner, V.P., 200 Park Ave., Suite 5305, New York, N.Y. 10017. Mollie Cleveland, 202-377-4705.

Chemical Industry Equipment Exhibition. U.S. Trade Center, Milan. Oct. 12-16. Italy's chemical industry is the fourth largest in Europe, with production of primary chemicals totaling $12.7 billion in 1974. Estimates through 1990 indicate

that the chemical sector will enjoy growth rates of around 20 percent annually over the total period. U.S. technology in this field is highly regarded. Held concurrently with the MAC International Chemical Exhibition at the same location, it will provide U.S. firms access to a number of European and Mediterranean markets. Sam Spaulding, 202-377-4508.

Bucharest International Fall Fair; Agricultural Machinery and Food Processing Equipment. Oct. 16-25. The new Romanian Five-Year Plan (1976-80) allocates $7 billion in investments to increase agricultural production, and the Romanian food processing industry is to expand at a rate of 7 percent per year to match the planned growth rate for agriculture. Romania and the United States have recently signed two agreements to cooperate in agriculture. Mike Frisby, 202-377-4810.

Engineering Design Components. U.S. Trade Center, Milan. Nov. 23-27. Components, materials and technology in the machinery, automotive, aerospace, and other equipment and electro-mechanical industries will be featured. Transmission components, hydraulic and pneumatic components, electrical and electronic controls, special materials, shapes and forms, joining systems and components are included. U.S. products have tremendous potential in this market. Runs concurrently with BIAS, international automation engineering exhibition, at the same fairgrounds. J. Michael Springmann, 202-377-4975.

Electronica 76. Munich. Nov. 25-Dec. 1. Germany's total consumption of electronic components is predicted to exceed $1.7 billion in 1977, while the market for electronic production and test equipment is expected to reach $343 million. In both categories, imports account for more than 40 percent of the entire market and the United States is the country's leading supplier with a share of about 28 percent. Best sales opportunities exist for U.S. exporters of color TV tubes, capacitors, resistors, integrated circuits, diodes, transistors, production and test equipment, and materials. Best market prospects are in computers, measuring and testing instruments, industrial equipment, and medical electronic equipment. Don C. Schmadel, 202-377-2177.

Offshore International Exhibition. Birmingham, England. Dec. 7-10. The continuing development of North Sea oil resources offers good opportunities for U.S. suppliers of oil and gas field exploration, production and transmission equipment, instruments, systems, supplies and services. U.S. exports of oilfield equipment and pipe to countries active in the North Sea oilfields are substantial and growing. U.S. exports to the United Kingdom alone in 1975 totaled $32 million, up from $19 million in 1974 and $11 million in 1973. Demand is highest for oilfield equipment and pipe, but sales opportunities also exist for a wide range of supportive products, e.g., floating structures (rigs, barges, vessels, tanks, etc.), helicopters, telecommunications equipment, valves, processing and field instruments, welding equipment and drilling fluid. At least five new North Sea fields are expected to open by the end of this year. A $3 billion market for products and services is expected in 1976, with the total rising to $5 billion by 1980. Official exhibits will be mounted by many countries. George A. Kemp, 202-377-3713.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

0100, 0200, 0800, 3250 — MALAYSIA — Trengganu Tengah Development Authority is planning to establish **agricultural, clay-based and timber industries.** Joint venture arrangements with foreign firms which could provide technical know-how, capital, marketing assistance and training of local employees are desired. U.S. firms interested should submit proposals in 10 copies before May 1. General Manager, Lembaga Kemajuan Trengganu Tengah, Wisma Maju, Jalan Paya Bunga, Kuala Tregganu. P-76228. OPIC.

0259, 2032, 2816, 2844, 3442—NIGERIA— Seeks joint ventures with U.S. firms to establish plants to produce following: **steel door and window frames, paint, baby foods, and toothpaste.** Also wishes to **develop large-scale poultry farm.** Established in 1949, firm manufactures cement building blocks, does freight forwarding and are building engineers. Also plans to enter oil exporting business. Company has 32 employees. Chief P. A. Adene, Managing Director, Rainbow Transport/Contract Services, S. 10 Ahmadu Bello Way, P.O. Box 62, Kaduna. Cable, RAINBOW TRANSPORT; telephone, 062-22377. P-76194. OPIC.

1021, 1041, 1061 — BOLIVIA — Owner seeks to sell or lease 14 **small mines** north of La Paz near Illampu Mountain. Mine areas range in size from 8 to 116 hectares and contain **silver, gold, copper and iron ores among others.** Water supply and road are near the mines which are legally clear with no bank or other debts. Interested investors should contact owner, Walter Lanz Good, Empresa Minera Mercenes, Casilla No. 444, La Paz, or J. H. Curry, Minerals Attache, Casilla 425, U.S. Embassy, La Paz. P-76195. OPIC.

1061 — INDIA — Seeks to acquire U.S. process know-how for **recovery of scheelite** from tailings of the Government of India's Kolar gold fields in Karnataka State. Plans call for American partner to undertake an investigation of economics of project and if feasible to provide technology for establishment of plant to produce marketable high-grade concentrates. Kolar gold fields have been mined since beginning of century and contain about 35 million tons of tailings. Of this amount, about 280,000 tons are 0.1 percent WO_3 and above and 550,000 tons are 0.2 percent WO_3 and above. Public sector Bharat Gold Mines Ltd. currently works the gold fields, adding about 200,000 tons of tailings annually. J. Marwaha, Joint Secretary, Department of Mines, Government of India, Ministry of Steel and Mines, Room 315A Wing, Shastri Bhavan, New Delhi. P-76196. OPIC.

2650—GERMANY—A leading manufacturer and processor of **paperboard packaging materials** is interested in exchanging technology, licenses. Company seeks latest American technical know-how and licenses for **packaging designs, systems, processes and related compact machinery.** Also wants to transfer its patent technology to U.S. in following fields: cardboard, cellular board and corrugated board folding, glueing and multi-color printing (offset, letterpress and gravured). German concern supplies beverages, foodstuff, footwear, detergent and textile industries. Employs 450, has branch plants in Hamburg, Mannheim and other cities. Is well managed, financially sound. Interested companies write: Dr. Peter Oldenburg, Kartonagenfabrik Annweiler Fritz Baumann KG, Postfach 1240, D-6747 Annweiler Am Trifels. Telephone, 06346/8001; telex, 04-53321; cable, BAUMANNANNWEILER. P-76197.

2819—MEXICO—Seeks to purchase technology for production of **potassium permanganate** and will consider future joint venture. New firm established with paid in capital of $40,000 by chemical engineer formerly with Mexico's second largest chemical company. Plans to construct plant in Monterrey area with annual capacity of 500 tons based on one workshift per day. Ing. Gorki Garcia Saldana, Gerente, Compania Informacion, S.A., Via Savotino Pte. 415, Col. Fuentes del Valle, Garza Garcia, N.L. Telephone: 56-96-29. WTDR. P-76198.

2821—INDIA—Firm seeks technology to establish plant to manufacture **ion exchange resins** for use in effluent treatment, sugar refining, desalination, pharmaceutical and food processing, pollution control and purification of chemicals. Firm intends to provide plant designing and fabrication services to customers to facilitate sales. Capacity of proposed plant will be 45,000 cu. ft. of ion exchanger resins annually. It is understood that Indian Government would give favorable consideration to approving such a plant and will consider granting permission for importing technologly depending on merits of case. It may even approve financial participation by foreign partner. Indian company belongs to Morarka Group of Bombay, medium sized conglomerate with interests in wire ropes, oil filters, sugar, refractories and

civil engineering. Anup R. Sachdev, Marketing Manager, Paterson Engineering Co. (India) Ltd., Chartered Bank Bldg., Mahatma Bandhi Road, Fort, Bombay 400 001. WTDR. P-76199. OPIC.

2834—AUSTRIA — Medium sized firm seeks distributorship arrangement with U.S. **pharmaceutical manufacturer** to sell each other's products. Will also consider licensing agreements. Company is manufacturer and distributor of ointments and laxatives, also produces specialties including ergot. Anton von Waldheim, P.O. Box 28, A-1091, Vienna. P-76201.

2842, 2899—UNITED KINGDOM—Seeks technology to expand **chemical product line.** Firm manufactures over 200 items to customers' formulations. Production facilities include filtration, in-line mixing, sieving and homogenizing. Chemicals produced include cleaning, degreasing, derusting, descaling and emulsifying agents; surface coating and carbon removers; non-destructive testing fluids, water displacing fluids and temporary protectives. Laboratory control procedures are approved to standards for defense, aviation and oil drilling contracts. Established in 1883, company employs 42; has annual sales above $2 million. Is member of Brent Chemicals Int'l Ltd. Group; has access to group's marketing services. T. P. Porter, General Manager, Sandeman Bros. Ltd., 50 Bilsland Drive, Maryhill, Glasgow G20 9SG, Scotland. P-76200.

2892—WEST GERMANY—Seeks licenses to manufacture **capsule sensitive slurry explosives.** Established 1972, firm manufactures, imports and sells explosives. Employs 10, has annual sales of about $600,000. Josef Waldenmeier, Spreng-Import Waldenmeier, Ulmer Strasse 7-9, D-8860 Noerdlingen. WTDR. P-76202.

3069, 3714—GERMANY—Firm is seeking U.S. licenses for manufacture of **fabricated rubber, combined rubber/plastics, or rubber/metal parts or accessories for automotive and other mechanical uses** (washers, membranes, shock absorbers). Wishes to complement its own line with U.S. technology products in 1-g. to 10-kg.-weight range. Has modern production and laboratory facilities and is able to carry out ASTM tests. Has monthly output of 140 tons with capacity of about 200 tons. Fifty percent of firm's products are sold to automobile industry. Employs 300. Ferdinand Strassfeld, Partner, Gustav Emde KG. Schoenbecker Str. 55-57, 5600 Wuppertal 2. P-76203.

3079—UNITED KINGDOM—Seeks technology to manufacture **child-resistant plastic containers for tablets.** Effective Jan. 1, 1977, U.K. law will require child resistant packaging for drugs. Firm currently produces various types of pharmaceutical containers by injection molding. Specializes in producing large numbers of relatively small items. Employs 70, has annual sales of $2 million. L. G. Stubbs, Sales Director, A.C.W. Ltd., 40 Hutcheon St., Aberdeen AB9 2WP, Scotland. P-76204.

3079, 3599—UNITED KINGDOM—Seeks licenses to produce: **thermo plastic materials of particular interest to engineers, plus wide range of industrial plastic materials; induction molded components of all materials; materials cast by block polymerization.** Has capability to design and manufacture tooling. Also has comprehensive engineering machine shop which manufactures components from stock shapes and is equipped for milling, gear cutting and repetition production on capstans, turret lathes and automatics. Above services are offered to U.S. firms wishing to have their products manufactured under license and sold in U.K. and Europe. A. Graham Easton, Director, Sturrock Group, Nylonic (Northern) Ltd., 110 Norman St., Bridgeton, Glasgow G40 4ED, Scotland. P-76205.

3255—SPAIN—Seeks to license technical know-how, including patents to manufacture **aluminum refractory material, silica refractory material, refractory cement plus related refractory products.** Will also consider possibility of joint venture. Established over 100 years ago, firm has 530 employees and assets valued at roughly $4.5 million. Produces about 25,000 tons per year of refractory products, such as bricks used for electric furnaces for steel plants. Enrique Garcia Cao, Manager, INLASA-La Industria y Laviada, S.A., Avenida de Portugal 25, (P.O. Box #9), Gijon, Oviedo. Cable, INLASA; telex, 37417 e.; telephone, 985/343-005. WTDR. P-76206.

3259, 3272—JAPAN — Seeks licenses to manufacture **portland cement roofing slates** with reinforcement materials other than asbestos, such as mineral fibers or rust proof treated metal fibers. Established in 1957, firm is largest manufacturer of synthetic rubber in Japan, with 2,500 employees and annual production valued at 80 billion yen. Hideomi Namba, Manager, Planning and Development Division, Building Materials Dept., Japan Synthetic Rubber Co. Ltd., 11-24 Tsukiji 2-chome, Chuo-ku, Tokyo 104. Cable, SYNTHETICO TOKYO; telex, 0252-3611 JSRCTK TOK. P-76207.

3312—BRAZIL — Ministry of Industry and Commerce invites **steel pipe manufacturers** to install plant in Brazil in joint venture with Brazilian firms. U.S. firms interested in installing and operating steel pipe plant for production of seamless pipe in OD ranging from 15 to 40 cm., with reduction for drawing down to 5 cm., should submit proposals for plant with minimum production capacity of 150,000 tons per year. Enterprise must also be provided with cold-drawing line for pipes smaller than 5 cm. OD with minimum capacity of 30,000 tons per year and thermal finishing facilities. U.S. firms should correspond with Aluisio Marins, Executive Secretary, Conselho Nacional de Nao-Ferrosos e de Siderurgia-CONSIDER, Esplanada dos Ministerios, Bloco 6-8. Andar, Sala 800-Brasilia, D.F. P-76208. OPIC.

3312, 3433—NETHERLANDS — Manufacturer of **gas heating appliances and stainless steel milk coolers** is interested in receiving business proposals for manufacture and sale under license of equipment compatible with line. Company is also subcontractor for sheet metal and stainless steel products. Reports it has presses of up to 630 tons, table dimensions of 2,000 x 2,500 mm., welding machines, assembly lines for sheet steel and stainless steel equipment. Also has an enamel and lacquer department. Enterprise is wholly owned subsidiary of large international trading, production and transportation group, Internatio-Muller, Rotterdam. J. Ten Have, Koninklijke Fabrieken Diepenbrock & Reigers (DRU) BV, 24 Hutteweg, Ulft, Gelderland. P-76209.

3353—JAPAN—Firm interested in locating U.S. firms capable of providing technological assistance for manufacture of **aluminum (or aluminum alloy) sheet** with strength ranging from 57,000 psi (41 kg./m.^{2}) to 72,800 psi (52 kg./m.^{2}). Wishes to market such sheets as road guardrails and related products. Until it goes into local production under license, firm hopes to purchase this material from U.S. partner for trial manufacture and marketing of end products. If product meeting above specifications has not been developed, company would consider joint research project with qualified U.S. manufacturer. Firm was established in 1960 as wholly owned subsidiary of Nippon Kokan Kaisha, Ltd., one of five largest integrated steel mills in Japan. Employs 835. Kojiro Kii, Manager, Sales Department, Nippon Kokan Light Steel K.K., 9 Nihonbashi Hon-cho 1 chome, Chuo-ku, Tokyo 103. Cable, NKLIGHTSTEEL, TOKYO; telex, J2222221 LS TOKYO. P-76210.

3423—INDIA — Gautam Industries Private Ltd., newly incorporated closed corporation, is interested in obtaining U.S. technical know-how to manufacture **forged hand tools.** Has also indicated interest in considering equity participation with its foreign partners in conformity with Government of India's existing foreign investment policy. Project proposal envisages establishment of new corporate entity to undertake production of 3,500 metric tons annually of hand and cutting tools. New plant will be in Faridabad where State government of Haryana has agreed to provide basic infrastructural facilities and attractive investment incentives. Total cost of project is estimated at $2.5 million. M. L. Mehra, D-372 Efence Colony, New Delhi 110003. P-76211. OPIC.

3429—MEXICO — Manufacturer of **door locks, padlocks and hinges** seeks to establish joint venture relationship with medium-sized U.S. lock manufacturer. Firm is in process of formation. Presently employs 60. Company estimates purchases of dies and machinery will total $400,000. Ralph A. Camacho, Manager, Safety Locks, S.A., Atlixco #54, Mexico 11, D.F. Telephone: 905-514-1099. P-76212.

3469—UNITED KINGDOM—Kerr Engineering Ltd., producer of **precision machined components,** seeks licenses or joint ventures. Operates well equipped plant with range of machine tools and engraving, polishing, pressure testing and contract maintenance capabilities. It also assembles units in light- to medium-engineering and supplies petrochemical and other industries. Firm offers its facilities to U.S. concerns seeking manufacturing base in U.K. Kerr Group comprises eight companies engaged in engineering, heating, plastics, electrical and computer industries. A. A. Finch, Director, J. & W. Kerr Group Ltd., Kerr Engineering Ltd., Virginia St., Greenock PA15 1EU, Scotland. P-76213.

3523—ECUADOR—Seeks license or joint venture to **manufacture or assemble agricultural equipment.** Firm produces 300 bus bodies annually. Also fabricates dump truck bodies, garbage truck compactor bodies and truck trailers. Operates 11,000 sq. meter plant outside Quito equipped with metal cutting, welding equipment, power tools, painting facilities. Is prepared to purchase additional equipment needed for agricultural machinery venture. Firm is one of Ecuador's leading industrial establishments; reported 1975 sales of $10 million. Is aggressive, well managed. Recent market survey indicated farm items with largest sales potential in Ecuador are wheel tractors; soil preparation implements; and harvesters, threshers and combines. Klaus Bodenhorst, General Manager, Carrocerias Ecuatorianas Thomas S.A., Casilla 4880,

Quito. Cable, THOMASQUITO; telex, 2189. WTDR. P-76214.

3540—UNITED KINGDOM — Manufacturer of **extensive range of machined components and tools** seeks licenses or similar production agreements. Company has large welding facilities and fitting shops to complete large and small assemblies. Well equipped shop can do horizontal boring and turning work on manual, semi-manual and completely automatic machines. Firm offers above facilities to U.S. companies interested in serving medium- and medium-heavy engineering field in U.K. A. Graham Easton, Director, Sturrocks Group, Brander Cullen & Engineering Co., Ltd., 110 Norman St., Bridgeton, Glasgow G40 4ED, Scotland. P-76215.

3544—FRANCE—Manufacturer of **wood, metal and wax molds** for use in foundry industries and custom manufacturing seeks licensing rights for manufacturing all types of molds. Firm is working under contract for automobile and heavy mechanical industries. Established 1952, employs 45. Mrs. Pahaut, Commercial Manager, Societe Nouvelle de Modelage, 134-146 rue Jean-Jaures, 08700 Nouzonville. Telex, MECHA 840016; phone, 24-34-83-15. P-76216.

3568, 3728—FRANCE — Manufacturer of fuel burners, precision mechanical parts for aviation, navy and coal industries is interested in manufacturing under license **transmission components,** for example, swirel joint couplings, automatic car couplings and clutches; centrifugal, toothed and strap clutches; gradual clutches; magnetic and electro-magnetic brakes. Established 1932, employs 82; annual sales volume, $1.3 million. Mr. Lefort, Commercial Manager, Societe Industrielle d'Applications Mecaniques 2-4 Passage d'Iena, 82300 Levallois Perret. Telex, 600218; telephone, 737-48-70. P-76217.

3573—UNITED KINGDOM — Computer division of large group produces and markets wide range of **data processing equipment and services.** Including electronic accounting systems, mini-computers, terminal systems, peripherals, small business computers and software services. Is interested in licenses to manufacture products compatible with its present range. Group provides services and products to oil industry. Employs over 400,000, reports 1974 sales of $8 billion. Maintains active research and development program. Anthony J. Barker, Executive, Phillips-Pye Offshore Group, 7 Queen's Road, Aberdeen, Scotland AB1 6YD. P-76218.

3589—THAILAND—Seeks U.S. firms to establish **turnkey facility to produce energy or some other product (except fertilizer) from garbage and refuse.** Annual capacity would be approximately 600 tons of refuse daily; estimated cost of proposed plant is $15 million. Bangkok Metropolis Administration has several garbage/compost plants in operation, plans to set up another. Write: Kunthorn Aksharanugraha, Charturong Arphon Ltd. Partnership, 457 Phra Sumaru Road, Bangkok. WTDR. P-76219. OPIC.

3621—INDIA — Recently retired army officers seeks license to manufacture **mini/micro motors.** Plans to establish facility to produce 20,000 motors annually for computer and defense applications. Has obtained GOI approval for project. Primarily an export oriented enterprise. Indian entrepreneur has good business contacts and capability to raise necessary financing for proposed venture. Brigadier R. R. Suri, B-81 Defence Colony, New Dehli 110024. P-76220. OPIC.

3623, 3646—BOLIVIA—Seeks licenses or joint venture to produce **electrodes.** Reportedly, there are presently no electrode manufacturing facilities in Bolivia. Company is also interested in license to manufacture and market **mercury street lighting devices.** Sr. Raul Artero, Femco, Casilla 1830, Cochabamba, Bolivia. P-76221. OPIC.

3623—UNITED KINGDOM—Licenses or similar arrangements are sought by division of major industrial group. Presently, division provides extensive range of **arc welding electrodes** to meet most stringent requirements. Also supplies **automatic and semi-automatic equipment for CO_2 welding, welding wires and range of electric transformers.** Is interested in making any similar products. Parent companies provide services and supplies to oil industry. Total 1974 sales were over $8 billion. Employs 400,000; principal contractors to electrical and electronic projects. Anthony J. Barker, Executive, Pihilips-Pye Offshore Group, 7 Queen's Road, Aberdeen, Scotland AB1 6 YD. P-76222.

3662—UNITED KINGDOM—Licenses to manufacture compatible products are sought by producer of medium-range **sonars** for surface vessels and submersibles. Company also makes **sonar beacon locators and echo repeaters and underwater systems.** Is division of large group supplying services and products to oil industry. Is principal contractor for electrical and electronics projects. Anthony J. Barker, Executive, Philips-Pye Offshore Group, 7 Queen's Gardens, Queen's Road, Aberdeen, Scotland AB 1 6YD. P-76223.

3679—UNITED KINDOM—Firm providing **comprehensive data processing service** to industry and commerce offers its services to U.S. firms. These include systems design; programming in COBOL PL/1 FORTRAN RPGII and ASSEMBLER languages; data preparation, computer processing; remote job entry; and computer output on microfiche. Concern's activities are located in new facility with modern equipment capable of wide application. Employs 50. Is associated with group of eight companies involved in engineering, heating, plastics, electrical and computer industries. D. McConnell, Director, J & W Kerr Group Ltd., Kerr Computer Services Ltd., Virginia St., Greenock PA15 1EU, Scotland. P-76224.

3693—UNITED KINGDOM—Firm seeks licenses to produce items in the **medical electronic equipment field.** Produces lightweight electrocardiographs, battery operated defibrillators, versatile ventilaters for anaesthesia or respiratory care, modular patient monitoring systems, X-ray diagnostic and dental systems, electrosurgery equipment and physiotherapy shortwave equipment. Is interested in products compatible with this line. Anthony J. Barker, Executive, Philips-Pye Offshore Group, 7 Queen's Road, Aberdeen, Scotland. P-76225.

3829, 3832—UNITED KINGDOM—Manufacturer and worldwide exporter of laser, spectroscopic and chromatographic accessories and optical components seeks licenses from U.S. firms to manufacture complimentary products. Has particular interest in **analytical instruments.** Has 47 employees, annual sales of $700,000. B. Hawker, Managing Director, Analytical Accessories Ltd., 241 Main Road, Sidcup, Kent DA14 6QS, England. WTDR. P-76226.

3861—UNITED KINGDOM — Firm specializing in design of **sophisticated mechanical systems** incorporating electrical, hydraulic, pneumatic, optical and electronic sub systems seeks licenses. Wants to make products compatible with present skills. Has special expertise in manufacturing **high-speed document feeding** and **microfilm recording equipment.** Is member of industrial group with well established sales outlets in U.K. and Europe. Bowman Scott, BSC, Director, Plasmec Ltd., Weydon Lane, Farnham, Surrey, GU9 8QL, England. P-76183.

7001—UNITED KINGDOM—U.S. investor sought for development of **seafront hotel in Brighton,** one of country's leading convention, conference and tourist centers. Hotel will be on 1.78-acre site and have minimum of 250 bedrooms with ancillary meeting rooms, banquet halls, restaurant and other pertinent facilities. Cyril Dutton, Borough Estates, Surveyor's Department, 30 King's Road, Brighton, England. Telephone (0273) 29801, extension 280. Additional information available from Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-76227.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Domestic Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-377-2248), referring to the appropriate file number.

AUSTRIA—Manufacturer of special pharmaceuticals seeks working arrangement of mutual benefit with U.S. firm to make Dihydroergocristinmethansulfat (an **ergot of rye product** used in treating cerebral sclerosis) in U.S. Austrian company reportedly is well informed about FDA regulations. File 2962

FRANCE—Manufacturer of polyamide and polyurethane plastic materials used in wheels and rollers for metallurgical foundry, automobile, aviation, and other industries, is seeking U.S. firm to manufacture under license some of its line of 2,200 products. File 2963

GERMANY — Inventor offers two patented products for U.S. manufacturing under license: **electric energy cell**—power plant for private homes (battery-unit); and new type of **resistor for electrical heating** without any metallic substances. File 2964

GERMANY — Automatic parking system that can be installed in almost any building and does not require large land area or expensive construction is offered under license to U.S. firms. German firm claims system is profitable for lots of over 40 cars; parking rate of about 40¢ per car per hour would cover installation and amortization. Excellent for parking space near train stations. File 2965

GERMANY — Manufacturer of **chimney hood** useful in ventilation of factories, roofs, garages, warehouses, caravans, ships, is seeking U.S. firm interested in manufacturing product under license. File 2966

GERMANY — Manufacturer of **radial saws, circular saws, multi-purpose compact woodworking machines, and compact concrete mixers** seeks U.S. licensee in U.S. for German firm's products as well as U.S. licensor for European market of U.S. firm's product line. File 2967

GERMANY — Firm seeks joint venture agreement with U.S. firm to produce **gummed paper, labels, seals, self-sealing mailing cards** and other paper products. File 2968

GERMANY — Firm seeks U.S. licensees for manufacture of **automatic winding machines** for PVO film. File 2969

GERMANY — Manufacturer of combined **horizontal boring and milling machines, rapid drilling machines, rapid precision lathes and various milling machinery,** seeks joint venture and/or an exchange of licensing arrangements with U.S. firm engaged in similar manufacturing. File 2970

GERMANY — German manufacturer of **assembly lines with integrated soldering systems** for printed circuit boards with required special purpose electronics machinery and equipment seeks U.S. firm mutually interested in joint venture or cross-licensing agreement. File 2971

ITALY—Old-established firm offers both manufacturing rights and/or joint venture possibility to American firms interested in its **sheets, pillow-cases, table cloths, towels,** and other household linens. File 2972

SWITZERLAND—Manufacturing license is offered to U.S. firms for fully **automatic drip irrigation system.** Major advantages are optimal irrigation with least possible water consumption. File 2973

SWITZERLAND — Large and reputable manufacturer of newly developed **fiberglass-reinforced polyurethane hard foam** is searching for U.S. firm to manufacture the foam under license. Product is suitable for sandwich constructions, such as ski cores, light-weight insulation panels, building panels. File 2974

SWITZERLAND — License to manufacture **thermosetting epoxy and polyester powders** as well as **polyurethane and acrylic powders** for electrostatic application on earthed metal products is offered by Swiss firm. File 2975

Foreign Trade Inquiries

These trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Division, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1972 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Iron ores

1011XXX—PAKISTAN—Iron pellets (to be used as an alternative to steel scrap in electric furnace melting). Quantity about 4000 tons. Value approx. $600,000. Firm is large importer of iron scrap, chemicals, graphite electrodes, ferromanganese, ferrosilicon, etc. Imports from U.K., Japan, West Germany, Austria and United States. Wishes to import for use in its sister concern, Al-Noor Steel Industries Ltd., Karachi, engaged in steel melting and rerolling sheets and bars. Requests C and F Karachi quotations against L/C. Claims annual sales at $1 million. Employs 150 including 5 in sales. Reply to—Amin Gokal, Dir., Commercial Center of Pakistan Lin, Insurance House No. 3, 5th Floor, Habib Sq., M.A. Jinnah Road, Karachi, Pakistan. Cable "Cocepak" Karachi; Telex KR3664-HYDRI; Phones 236252 & 228312.

Anthracite coal

1111XXX—ITALY—Coal: subbituminous-lignite; bituminous-anthracite (as described below) tye: a) subbituminous-lignite for SL-RN, Krupp processes; b) bituminous-anthracite for Kinglor Metor process. Reactivity: Coal must be highly reactive and suitable for metallurgical use (production of sponge iron). Size: 5-25 mm. Swelling index: 1 or less. Ash softening point: 1. 120 degrees c; s: possibly below 1. Quantity: 150,000-180,000 m/t annually. Shipments: 20,000 m/t monthly to Acajutla (33 ft.). Port unloading capacity: 400 m/t daily. Data requested: Proximate analysis, size analysis, and all other. Tecnico—Commercial characteristics. Techint is preparing feasibility study on construction of metallurgical reduction plant in El Salvador. As project includes supplying of raw materials, firm seeks contacts with U.S. suppliers of coal with above characteristics. Techint is a leading corporation with wide range of activity in planning, engineering, supervision of construction of iron and steel, oil, chemical, petrochemical plants. Firm operates with ample financial means. Employs approximately 300. Enjoys good reputation. Reply to—Ing. Giancarlo Eminian, Mgr., Techint S.P.A., Via Cino del Duca 12, 20122 Milan. Cable: Techint; telex, MI 31-241; tel (02) 77561.

Building construction

● **15200—TURKEY**—Supply and erection of complete sawdust briquette factory. Bid deadline May 10. Complete facility for drying 60 percent moisture, 500 KG /H, sawdust, pressing and producing briquettes for use as fuel. Also one complete factory for production of wood parquet. Capacity: 50 sq. m. solid wood and 100,000 sq. m. mosaic wood parquet per year. Option: min. 90 days. Delivery period: Within 120 days from transfer of letter of credit, by which payment is to be made. Tender issued by: Orman Urunleri Sanayii Genel Mudurlugu, Fabrikalar Merkez Mudurlugu, Satinalma Komisyonu Baskanligi, 115/4 Ataturk Bulvari, Kizilay, Ankara, Turkey (Forest Products Division). Bidding specs. in English may be obtained from Modern Translation Bureau ($21 each for briquette plant and $12 each for parquet plant), Karanfil Sokak 36/7, Yenisehir, Ankara. Return completed tenders to Orman or to firm's Turkish rep, not to MTB.

Heavy construction

● **16200—KOREA**—Pusan Port Authority, Ministry of Transportation, is presently prequalifying construction contractors for construction of new port facilities at Pusan Port. Projects will be let as two separate contracts on unit price lump-sum basis for all procurement and erection. Will be financed by Korean Government and foreign exchange by IBRD. Only prequalified contractors will be offered "Invitation to Tender". Projects consist of: **Project No. 6**—second stage civil works construction of the Pusan Port coal, ore, and scrap handling complex at Pier No. 7, which includes approx. 90,000 sq. meters of finished area grading of which 80,000 sq. meters are asphaltic surfaced; 7,000 lineal meters of concrete piling for on-shore structure foundations; 1,800 lineal meters of new and relocated railroad facilities; three double platform truck weighing scales; 1,600 sq. meters of reinforced concrete buildings and complete utility systems for water, sewers and electrical distribution. **Project No. 7**—second stage civil works construction of Pusan Port container and grain handling complex at Composite Pier which includes approx. 365,000 sq. meters of finished area grading of which 91,500 sq. meters are PCC paved, 183,000 sq. meters are asphalt concrete surfaced, 44,000 sq. meters are asphalt treated surface; 3,700 lineal meters of railroad; one

pile supported steel railroad bridge river crossing; 1,300 lineal meters of access road including one pile supported reinforced concrete bridge river crossing; 8,700 sq. meters of single and multi-story reinforced concrete buildings; and complete utility systems of water, sewers, and electrical distribution. Contractors with previous experience in similar type of works wishing to prequalify individually or as joint venture for one or both projects should write to Consultant requesting prequalification documents and enclose five copies of articles of incorporation of company organization, financial statements, and summaries of construction experience. Completed prequalification documents in 5 copies in English (Korean Contractors must submit 5 copies in both English and Korean) will be accepted no later than June 7 in office of the Pusan Port Authority, 46-63 3rd St., Daechang-Dong, Dong-Ku, Pusan, Korea. Questions which may arise concerning documents prior to their submission should be directed to Lyon Associates, Inc., B.P.O. Box 540, Pusan.

Steel mill products

● **33100—COSTA RICA**—300 units wire mesh, 194 mm x 2.49 meters, different widths ranging from 4.76 mm to 76.20 mm. Tender No. 3091; bid deadline May 11. Instituto Costarricense de Electricidad, Apartado 10032, San Jose. Tender documents available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-2438.

● **33100 — BURMA** — 1,020 sets of steel railroad wheels and axles and 600 rough steel tires for carriages and wagons. Tender No. T0065; bid deadline May 10. Burma Railways Corp., Bogyoke Aung San St., Rangoon. Tender documents available from U.S. Embassy Rangoon. $3.75 per set.

● **33100—IRAN**—50,000 kgs. steel bar st 60 1"; 30,000 kgs. steel bar st 60 27/mm; 30,000 kgs. steel bar st 60 28/mm. Tender No. 2725/54; bid deadline May 5. Iranian State Railways, Tehran. Tender documents available from Iron & Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-2438.

● **33100—IRAN**—20,000 kgs. Babbit metal 5 percent Din/703. Tender No. 2694/54; bid deadline May 4. Iranian State Railways, Tehran. Tender documents available from Iron & Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-2438.

● **33100—THAILAND**—17,193.6 mt of 80 1BX flat bottom steel rails; 117 mt of steel fishplates for 80 1BX rails; 24.336 mt of fishbolt and nuts for British Standard 80 A rails. Tender No. 7501/2519; bid deadline May 25. State Railway of Thailand, Yose, Bangkok. Tender documents available from Iron & Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-2438.

Iron, steel foundries

● **33200, 34900, 38200—GUATEMALA**—Ministry of Communications and Public Works, Ministry of Finance, through Department of State Properties and Public Tenders, is calling for bids for purchase of centrifuged conductive iron cast pipe, accessories, valves and meters to be installed in Guatemala City on stretch of road between "La Brigada" Municipal Water Purification Plant and distribution reservoir "El Guarda," which is part of Xaya-Pixcaya National Water Project XP-10-A. All information, specifications, plans and other documents, bid #16-76, available at Executive Unit, Xaya-Pixcaya National Water Project, Diagonal 6, 16-01, Zona 10, Guatemala City, in exchange for order to deliver two 50 yd. rolls of blueprint paper, 42 inches wide, and one 50 yd. roll blue print paper, 42 inches wide. Offers must be presented in Spanish in sealed envelope with description of contents, name and address of bidder on outside of envelope, to Departamento De Bienes Del Estado Y Licitaciones (Dept. of State Properties & Public Tenders), 3A. Calle 3-49 Zona 1, Guatemala City, by May 14.

● **33200—MOROCCO**—Supply of hydrants for irrigation. Tender No. 11-76 ORSM; bid deadline May 18. Office Regional de Mise en Valeur, Agricole du Sous-Massa, Rue des Administrations Publiques, B.P. 21, Agadir, Morocco. Tender documents available at above address at DH 400 (about $91) plus postage, by certified check. Correspondence preferred in French.

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate or make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that pursuant to Section 3(5) of the Export Administration Act of 1969, as amended, it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action, including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

Rolling, drawing, & extruding of nonferrous metals

● **33500 — BURMA** — Supply of various quantities and types of telephone cable and accessories. Tender No. T0055; bid deadline May 27. Posts and Telecommunications Corp., 125 Pansodan St., Rangoon. Tender documents available from U.S. Embassy, Rangoon, at $30.46 per set.

● **33500—PERU**—6,000 meters single pole cable for 220 KV; 14 single pole terminals for cables and 15 bimetallic splicing clamps, copper and cadmium-aluminum. Bid deadline May 14. Electrolima, Conde de Superunda 261, Lima 1. Tender documents available at above address at $22.22 per set.

Cutlery, hand tools, general hardware

3429832—GERMANY — Locks & fittings for suitcases, briefcases and luggage. Has good sales ability. Annual sales: DM 10 million. Financial ref: Stadtsparkasse, Deutsche Bank, Commerzbank, all in 5650 Solingen. Reply by fastest means to—Mrs. Ulrike Franzen, S. Franzen Soehne GmBH & Co. Kg, Postfach 190246, 565 Solingen Wald. Tel: 02 122/310064.

Fabricated structural metal products

● **34490—IRAQ**—Waterproof iron safes, 15,000 units. Color grey, height 97 cm., width 51 cm., depth 56 cm. Contact Brigadier Arfan Latif, Director, Directorate of Contracts and Purchases, Ministry of Defense, Baghdad. Cable DIFAH.

Fabricated metal products

● **34940—ECUADOR**—Secretaria De La Comision Especial De Poza Honda, Calles Sucre Y, Octubre, Esquina, Portoviejo, Ecuador, has issued tender no. 01-76 for supply of 1,000 ea., ½-inch inside diameter incorporation water intakes, 1,000 ea., ½-inch inside diameter, 0 to 3 cubic-meter residential consumption registering water meters. Bid deadline May 11. Items must conform with AWWA and ASTM specifications. Bidders must be licensed to do business in Ecuador. U.S. firms may participate through locally-established agents.

3499475—BARBADOS—Fire hose reels suitable for bldgs. Acts as agents, distr. & retailers of fire fighting & safety equip. Firm working on project financed by USAID funds & would appreciate receiving brochures & price lists. Latest WTDR (1/76) recommends firm as very suitable contact for U.S. firm. Cable, call or write—Mr. Gordon Hamilton, Dir., Alleyne Arthur & Marson Ltd., P.O. Box 226, High St., Bridgetown, Barbados, WI. Cable "Arthur," Barbados; tel 64724.

Engines, turbines

3511124—EGYPT—Supply 20 to 30 gas turbine generators with total capacity approx. 120 MGW's; 20 to 30 gas turbine generators with total capacity approx. 180 MGW's; 2 units ea. 150 MGW for thermal power station with capacity 300 MGW's. Nosseir is prominent in business circles in Egypt, is chairman of 2 companies & partner in number of others, well connected in most Arab countries, esp. Saudi Arabia. Reply ASAP to—Mr. Mohamed M. Nosseir, 4, El Hesn St., Giza, A. R. E., P.O. Box 1913, Cairo. Cable Gizasyst; tel 987114—987276; telex 2096.

Construction, mining, materials handling machinery, equipment

● **35300 — TURKEY** — Ten side-arm log loaders; 4000 kg. load capacity, 4 meters lifting height, 1200 mm. long, max. 900 mm. spread forks, 4-cycle, min. 70 HP diesel engine. Four gang mills; frame width: 700-760 mm. width between rolls: 700-760 mm. hydraulic driven. Band mills: (a) 2 ea. 1600 mm. dia. top wheel, automatic carriage; (b) 1 ea. 1400 mm. dia. top wheel, automatic carriage; (c) 2 each 1500 mm. dia. top wheel, for slashing saws. Eight edgers: opening between side plates: 600 mm. min. cutting thickness 120-160 mm., min. number of saw heads up to min. 6. Tender number not specified; bid deadline May 10. Orman Urunleri Sanayii Genel Mudurlugu, Fabrikalar Merkez Mudurlugu, Satinalma Komisyonu Baskanligi, 115/4 Ataturk Bulvari, Kizilay, Ankara (Forest Products Industry). Option: min. 90 days, delivery period: within 120 days as from date of L/C transfer, Prices: in terms of f.o.b.-f.o.t.-Istanbul; Payment: L/C. Bidding specifications in English may be obtained from Modern Translation Bureau (address: Karanfil Sokak 36/7, Yenisehir, Ankara, Turkey) for $10 (loaders); $17 (mills); $25 (band mills); $8.50 (edgers). Checks payable to Modern Translation Bureau should accompany orders. U.S. firms should forward completed forms direct to buyer or thru U.S. firm's rep to buyer.

Special industrial machinery

● **35500 — TURKEY** — Six log loaders: front-end clamp, rubber tired. Load capacity: 2500 kg. lifting heights: 3 meters. Capable of clamping 15-100 cm. diameter logs. Saw sharpening machines: 8 ea. automatic disc, gang and band saw sharpeners; two ea. gang saw cross sharpeners; 3 ea. fully automatic straight band sharpeners; one double-edge band sharpener; 5 tooth tip dressing-equalizing machines; 3 weld bevelling machines; 3 saw band brazing machines; 8 sawtooth setting hand machines; 4 band straightening rolls; 5 metal detectors: complete with transport conveyor; for detection of metal in logs up to 80 cm. Tender No. not specified; bid deadline May 10. Orman Urunleri Sanayii Genel Mudurlugu, Fabrikalar Mudurlugu, Satinalma Komisyonu Baskanligi, 115/4 Ataturk Bulvari, Kizilay, Ankara (Forest Products Division). Option: min. 90 days; Delivery period: within 120 days as from date of L/C transfer; Prices: in terms of f.o.b.-f.o.t.-Istanbul; Payment: L/C. Bidding specifications in English may be obtained from Modern Translation Bureau (address: Karanfil Sokak 36/7, Yenisehir, Ankara), for $10 loaders; $12.50 saw sharpening machines; $10 detectors. Checks payable to Modern Translation Bureau should accompany orders. U.S. firms should forward completed forms direct to buyer or through U.S. firms' rep to buyer.

General industrial machinery

● **35600—MOROCCO**—Supply and installation of pumping equipment, including electrical equipment, to irrigate 6,300 hectares in Upper Valley of Souss, East of Agadir, near Taroudant. Tender No. 9-76 ORSM; bid deadline May 4. Monsieur le Directeur, Office Regional de Mise en Valeur Agricole, Du Sous-Massa, Rue des Administrations Publiques, B.P. 21, Agadir. Project financed by Moroccan Central Government Investment Budget. Firms interested may obtain bidding file from above address against payment of DH 300 (approximately $68) plus postage, by certified check to order of Monsieur L'Agent Comptable de L'O.R.M.V.A. Reference 9-76 ORSM. Correspondence preferred in French.

● **35600—MOROCCO**—Supply and installation of electromechanical equipment for two main pumping stations, SP 1 & SP 2, to irrigate 15,000 hectares in the R'Mel area of the Gharb Valley, North of Kenitra. Tender No. 1/76; bid deadline June 1. Monsieur Le Directeur, Office Regional de Mise en Valeur Agricole, Du Loukkos, B.P. No. 48, Ksar El Kebir. Project financed by Moroccan Central Government Investment Budget. Firms interested may obtain bidding file from above address against payment of DH 500 (approximately $114) plus postage, reference "Appel D'Offres 1/76." Correspondence preferred in French.

Office, computing, accounting machines

● **35670—EL SALVADOR** — Consejo De Mercados De San Salvador (Comersan), 5A. Avenida Norte No. 122 San Salvador, El Salvador, has issued tender No. E-15 for supply and installation of two motor truck weighing scales of about 50-ton capacity each and with 50-foot long by 10-foot wide platform. Bid deadline May 4. Purchases will be partially financed with IBD Loan 222/SF-ES. Specifications and bidding regulations in Spanish available free to interested bidders or representatives from above address, or on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-5569.

Service industry machines

● **35800—GUATEMALA** — Bids expected to be called for by mid-1976 on following equipment for three 100-bed hospitals: complete hospital laundry system, sterile type air-conditioning units for operating rooms, walk-in cooling rooms, cooking utensils and systems, water softening units. Brochures, catalogs and pricing information should be forwarded to Dr. Edgar Antonio Barrios-Flores, Unidad Ejecutora De Salud, 5A. Avenida 13-27, Zona 9, Guatelama City.

Radio, television receiving sets

36520—SURINAM — Healy and Rubenstein Advertising N.V., P.O. Box 110, Paramaribo, seeks c.i.f. price quotations, technical literature and catalogues on phonograph record pressing equipment (33⅓) including record molds, trimmers, extruders, matrix equipment, recording equipment and printing press (stereophonic and monaural).

Communications equipment

● **36610 — ALGERIA** — Monsieur Le Directeur Des Travaux Petroliers, Sonatrach, 2, Rue Du Capitaine Azzoug, Hussein-Dey, Algiers, has issued tender for supply and installation of one automatic switchboard with 1,600 directions and 100 network materials; 1,000 telephone exchanges, 30 sets to filter; one intercom set with 3 lines; networks and 15 directions; and one interphone set with 30 directions. Bid deadline May 15. Correspondence and offer in French; all specs. metric.

● **36610 — ARGENTINA** — Departmento Compras Y Suministros, Subterraneos De Buenos Aires, Bartolome Mitre 3342, Buenos Aires, has issued tender No. 7895/76 for supply of underground telephone communications system (FM), switching, amplifying and repeating equipment, including transmitters, interconnectors and telephone sets. Project design and installation including training course for subways' employees. Bid deadline May 26. Foreign bidders must have local representative or should establish representation in Argentina in order to qualify. Bid specifications and conditions may be purchased from above address for approximately US$35. Correspondence in Spanish. Copy of specifications also available on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-377-5569.

● **36620—ALGERIA** — Bureau D'Equipment, Enema ,1, Avenue De L'Independance, B.P. 829 Algiers, has issued tender No. 1/76 for supply and installation of ten VHF-VOR plus dopler omnidirectionnal radio beacons for air traffic. Bid deadline May 10. Correspondence and offer in French. All specs. metric. Copy of specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-377-5569.

● **36620 — BRAZIL** — Rede Ferroviaria Federal S.A., Diretoria De Administracao E. Financas, Praca Duque De Caxias 86-3 Andar, 20000 Rio De Janeiro has issued tender No. 2/76 for design, supply, assembly, installation and testing of railroad signalling system. Bid deadline June 21. Interested firms may purchase full bid instructions and specifications including preliminary drawings for approximately US $1,100 at above address.

● **36620—BURMA** — Posts and Telecommunications Corp., 125 Pansodan St., Rangoon, has issued Tender No. 3 for supply of microwave radio relay systems for Telecommunications Development Project. Technical specifications, instructions and commercial conditions from above office for $30. Bid deadline June 15. Will be financed from proceeds of IDA credit.

● **36620—SYRIA**—Directorate General of Broadcasting and TV, Baramkeh Square, Damascus, has issued tender No. 5819 (5/3) for establishing complete TV transmission station (10 KW, color/black and white) with antenna system and tower at Cheikh-Saleh near Homs, Northern Syria. Bid deadline June 5. Copy of specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Dept. of Commerce, Washington, D.C 20230, 202-377-5569.

● **36620 — THAILAND** — Director-General, Public Relations Department (PRD), Rajdamnern Ave., Bangkok, has issued tender for engineering services including necessary personnel, facilities, equipment and materials for nationwide television network project costing approximately $10 million. Bid deadline July 1. Project will be jointly financed by government budget and foreign loan. Copy of specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-377-5569.

Instruments for measurement, analysis and control

● **38230 — PERU** — Abraham Ventocilla, Manager, Electrolima (Former Empresas Electricas Asociadas), Conde De Superunda 261, Of. 316; Telex: Light 3540057, Lima 1, has issued tender No. SC-76-192 188833 for supply of 11,500 units of three-phase electric current meters. Bid deadline May 12. To be financed with IBRD loan. Copy of specifications available from above address for $22.22 per copy or on short-term loan basis to firms located in U.S. from Science & Electronics Div., Room 1006, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-377-5569.

● **38290—COLOMBIA** — Empresas Publicas De Medellin, Division Commercial, Edificio Miguel De Aguinaga Oficina 607, Medellin, has issued tender No. 08/3/76 for supply of hydrometeorological equipment as follows: 37 rain gauges for weekly recording; 30 water-level recorders of long lasting-recording; 5 anemographs, DC or self-power generating; 2 mechanical anemographs; 3 anemometers (wind direction gauges); and 5 actinographs for weekly recording. Bid deadline May 4. Offers acceptable only from manufacturers specializing in this type of instruments or from accredited agents. Terms and specifications may be obtained from above address for approximately $6, not reimbursable.

Surgical, medical, dental instruments

● **38410—GUATEMALA**—Dr. Edgar Antonio Barrios-Flores, Unidad Ejecutora De Salud, 5A. Avenida 13-27, Zona 9, Guatemala City, has issued tender for supply of blood enzyme and cholesterol analyzers for medical laboratory use; complete dental chair units, dental X-ray units and centralized plug-in type oxygen distribution system for patients; complete visual and sound public address systems for use in hospitals. Bid deadline mid-1976. Dr. Barrois determining procurement requirements for three 100-bed hospitals to be financed by bid loan now being sought by Guatemalan Government. Catalogs and pricing information requested.

● **38410—COLOMBIA**—Oficina De Programacion, Servicio De Salud De Bogota, Avenida Caracas No. 53-80, Of. 302, Bogota, has issued tender No. SSB-02-76. Bogota's Health Service Division is interested in acquiring equipment for two new hospitals, consisting of X-ray equipment and accessories; sterilization equipment; surgery room and recovery equipment; ophthalmic equipment; clinical laboratory and pathologic anatomy equipment, etc. Bid deadline May 20. Specifications available at above address for $60, not refundable. Project will be financed by IDB Loan 344-SF-Co.

Watches, clocks, parts

3873561 — SWITZERLAND — Complete electronic LCD & LED quartz wrist watches with digital display. Requests prices on various models & quantity discount. Well-estab. retail discounter of photo & electronic home entertainment equip. Wants to add electronic watches to sales program. 4 retail outlets in Zurich. Annual sales $6 million. Excellent reputation, recommended trade contact. Reply to—Mr. Vinzenz Gaumann, Foto Hobby O. Rebmann, Roetelstrasse 29, C.H.-8042 Zurich. Tel 01/28 35 20; telex 54.429 Hobby ch.

3873561—SWITZERLAND—Modules for electronic, digital watches; assembled quartz watches. Dir. sale & rep. Old-estab., reputable mfr./distr. of watches seeking diversity in new lines. Employs 12. Sales territory: Europe. Reply ASAP to—Robert Schindler, Pres., Lloyd & Limaro SA, Rue Dufour 34, 2500 Bienne 3. Cable Montnus Bienne; tel 032/42 43 66.

3873561, 367411X — SWITZERLAND — LED & LCD electronic watches. Reputable Swiss mfg. & distr. of housewares, motors & electronic controls. Seeks to diversify in solid-state watches. Est. 1947, employs 30. Sales territory: Switzerland. Bank ref: Union Bank of Switz., Paradeplatz, 8021 Zurich. Large credits under usual guarantees. Reply to—Mr. Korn, Mng. Dir., Saturn AG, P.O. Box 19, 8902 Urdorf-Zurich. Tel 01/986 986.

3873587—HONG KONG—Quartz crystal for electronic watches. General importer & exporter claimed to have good connection in watch business. Bank reports firm has maintained properly conducted account, considered good sales contact. Cable — Mr. Winford Y. F. Chou, Gen. Mgr., Silver House Ltd., P.O. Box 5250, Kowloon, Hong Kong. Cable: Slvhouse, H.K.; tel: 3-694473.

38735XX, 3674111X—SWITZERLAND—Electronic digital watches, with liquid crystal display—in assembled form, or modules to be cased in Switzerland. Suitable for distribution in Europe by mail order system. Estab. 1973, employs 4. Bank ref: Banque Cantonale Neuchateloise, 2000 Neuchatel. Credit against usual guarantees. Business recommended. Reply to—Roland Sandoz, Mng. Dir., Solresist SA, Clos de la Serriere 66, 2003 Neuchatel. Tel 038/24 39 52.

Toys and amusements, sporting and athletic goods

39495XX—COSTA RICA—Archery equip; other sporting & athletic goods, especially surf boards & water skis, & other water sports equip. Umbrellas & parasols for beach use. Reply ASAP to—Robert Gilles, Mgr., Dis Auto Ltda, Apartado 4425, San Jose. Cable Disauto; Tel 25-08-05/25-08-36. Firm requests direct sale & agency agreement.

Manufacturing industries

3999944 — SPAIN — Cigar & cigarette lighters. Medium size co. operating mainly in E. Spain. Cites Spanish Chamber of Commerce & Industry, Valencia, as trade ref., & any bank as commercial ref. Quotations c.i.f. Port of Valencia. Call or cable—Mr. Jose Ferrer, Vila Mgr., Fersen-Decoracion, Denia 63, Valencia (6). Tel 96/373-1988. Interested in direct sale or agency.

3999998—MEXICO—Music box mechanisms, minimum initial order of 2,000; if price and quality suitable, total order will be increased to 10,000 mechanisms. Reply to—Mr. Walter Ruckstuhl, Fumesa, America Sur 807, Colonia Mirador, Monterrey, N.L. Tel 43-40-01.

Antique, secondhand stores

5931XXX—MEXICO — Interested in acquiring a used tug boat to push barge loaded with 800 tons salt. Boat should be approximately 35 meters in length and have 500 HP engine. Should be in relatively good condition and come with Lloyds Certificate if possible. Capital of $600,000 and annual sales of $240,000. Employs 16. Purchase will be financed through L/C. Would like to receive price quotations and photograph of craft. Correspondence in Spanish preferred. Reply to—Bernardo Obregon, Sales Golfo de Cortez, SA., Colon 920, Guadalajara, Jalisco. Tel: 12-7448.

5931XXX—TAIWAN—Secondhand building machines: excavators, bulldozers, asphalt pavers, vacuum sweepers, concrete dumpsters, motor graders, cranes, concrete mixers, tractors & trailers. Reply to—Mr. L. H. Liu, Mgr., Hanmin Trading Corp., P/2 9. Box 3265, Taipei, Taiwan 100. Cable Hanmin; tel 3619016.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Agricultural chemicals

2899XXX—BELGIUM — Chemical water additive for repulsion & penetration of fire streams. Estab. 1965, became partnership in 1971. Imports fire-fighting equip. & supplies, primarily from EEC countries & U.S. Seeks exclus. agent/distrib. rights. Info. available to embassy indicates Albag has good business reputation. Considered suitable contact for U.S. companies. Reply to—Mr. Albrecht de Schrijver, Mgr., Albag PVBA, Kerkstraat 55, 1711/Itterbeek. Telex 61180; tel 02/569.54.00.

Plastic products

3079081—UNITED KINGDOM — Plastic marine hardware. Part of Epping Motor & Marine Group Ltd., EPMOCO Marine Products mfrs., distributes & imports boat and marine accessories, trailer winches, water skis & boat propellors. Exports to Common Market & EFTA countries. Sales force covers U.K. & Europe. Interested in rep. U.S. firms in boat/marine acces. field. Reply to Rodney Lyons, Epping Motor & Marine Group Ltd., EPMOCO Marine Products, 558 High Rd., Ilford, Essex I63 8EQ. Tel. (01) 590 3103; cable EPMOCO Ilford. Ref: Midland Bank, 1 High St., Ramsgate, Kent.

Glass, glassware

32291XX — DOMINICAN REP. — Tumblers; stemware; tableware; cookware, ovenware (Pyrex, or equal). Partnership organized 1968 to engage in commission agency business, specializing in toys, hardware & stationery. Reply to—Jose Ramon Diez, Partner, Diez, Weil & Co., El Conde 203-2, Santo Domingo. Tel 682-2032. Co. ref.—G. Tice Co., Inc., 174 Fifth Ave., N.Y. 10010; Hartford Intl., One Penn Plaza, 250 W. 34th St., N.Y. 10001.

3229237, 3231633—UNITED KINGDOM—Table, kitchen glassware (novelty); interior lighting glassware. Acts as agents & distr. of U.S. oil lamps for hotel/restaurant table use; stainless steel housewares, etc., & multiple products of all types. In addition to domestic sales, sells to mass distr. throughout Europe & Middle East. Especially interested in representing U.S. mfrs. of products selling to catering outlets; durables & ornamentations & specialty items of equip., housewares, etc. Products would be marketed in U.K., Europe & Middle East via distr. Reply to—Gordon R. Smith, Mng. Dir., J. P. Smith & Sons Ltd., 31 Barrachnie Rd., Garrowhill, Baillieston, Glasgow, Scotland. Tel 041 771 3391; ref: Royal

Bank of Scotland Ltd., Academy St., Glasgow.

Glass products

3231633—UNITED KINGDOM—Novelty glassware. Part of Marwest Industrial Holding Group. Offers complete coverage of U.K. with own full-time sales force of about 50. Has warehousing, transport & distr. facilities for entire country. Selling wide range of U.S. products. Reply to—Martin Selman, Mng. Dir., Flemming, Munroe & Co., 525 Chesham House, 29/30 Warwick St., London W1R 5RD. Tel 01-404-5011. Ref: Barclays Bank Ltd., 114 High St., London E1.

Abrasive, asbestos, nonmetallic mineral products

329501X — SWEDEN — Vermiculite (hydrated magnesium - aluminum - iron silicate). If product suitable, orders of about 10,000 metric tons ea. will be placed in future. Products will be used as substitutes for asbestos which Swedish Natl. Board of Industrial Safety has found to be injurious to health of workers. Will be used in factories or other working premises. Large co. with annual turnover approx. Skr. 40 million. Excellent trade contact. Reply to—Mrs. K. Numelin, Kami-Intressen AB, Box 618, S-172 06 Sundbyberg 6. Cable Sodium; Telex 10048. Tel 08/28 91 60.

Steel mill products

3312185, 33134XX — FRANCE — Ferroalloys made in blast furnaces; ferroalloys produced in electric furnaces. Wishes act as agent on commission basis. Created 1965, employs 2, sells in France. Volume of sales $3 to $5 million. Bank ref: Societe Generale, Agence de Cimiez, 06000, Nice. Cable—Mr. Daniel Bonan, Agent, Robert Slama Produits Chimiques, 66, Ave. Georges V, 06000, Nice. Cable 470333F, tel (93) 803205.

3313XXX — BELGIUM — Ferromanganese; ferrochromium; ferrochromium silicon; ferrosilicon; other ferroalloys incl. ferrotitanium, ferrovanadium, ferronickel, ferrocobalt, ferrocolumbium, ferromolybdenum. Interested in representing U.S. mfrs. & exporters of ferroalloys. Sicomet asks that it be contacted only by U.S. firms selling semi-finished products of use to iron & steel industry & not finished products for end-user mfrs. Essentially interested in acting as wholesaler by importing in substantial lots & re-selling to Belgian & European iron & steel industry. Not equipped to sell its products to smaller end-users & mfrs. Sicomet is part of Feron Family holding which controls not only Sicomet (100 percent) but also Metallo Chimique (70 percent) & Sidal (aluminum manufacturer). Sicomet has annual sales turnover of BF 2 billion & is basically a sales, importing, exporting & purchasing agency for Metallo Chimique. Owns copper refining subsidiary in Hartford, Ill. called Chemetco. Firm highly recommended. Reply to—Mr. Jacques Henvaux, Sales Dir., Sicomet S.A., Ave. Palmerston 6, 1040 Brussels. Telex: 21412; tel: 02/735.40.20.

Primary smelting, refining of nonferrous metals

3332341 — THAILAND — Lead ingots, purity 99.99%. Progressive trading co. in Thailand dealing in chemicals & fertilizers. Has 200 employees & 45 salesmen. Considered suitable trade contact for U.S. suppliers. WTDR 08/75. Reply to—Charan Rungkietsakul, Metro Co., Ltd., 180-184 Rajawongse Road, P.O. Box 362, Bangkok. Cable: Metroco; tel. 211161, 224528.

Construction, mining, materials handling machinery, equipment

3535XXX — UNITED KINGDOM — Mechanical handling specialists dealing in all types of conveyors, palletizers & depalletizers, hoists & goods elevators. Employs 350. Annual sales 3,200,000 pounds. Wishes make contact with supplier of high bay pallet live storage system comprising infeed system to feed pallet loads of goods into tiered live storage racks together with removal system to feed required pallet load out of tiered storage system. Mr. Avey will be available in Chicago in April when he visits Natl. Material Handling Show. Reply to—K. F. C. Avey, Sales Dir., W. & C. Pantin Ltd., Centre Dr., Epping CM16 4JL. Tel Epping 72271.

Special industrial machinery

3551425 — MEXICO — Automatic filling-sealing-weighing equip. for frozen foods & vegetables in polyethelene bags. Exporter of frozen foods & vegetables. Reports sales of $3 million. Products are exported to U.S., Canada, Japan & Australia. Would like catalogs, price lists & info. on delivery terms. Reply to—James A. J. Rigby, Rigby International Sales, Tabasco 212, Mexico City 7, D.F. Tel 511-6154.

3559589—UNITED KINGDOM—Leather working machinery. Mfrs. of tanning & leather machinery, spiral cutting blades for leather industry, cutting knives for carpet & textile industries & bandsaws for timber trade. Reply to—Raymond L. Wilson, Dir., Edward Wilson & Son, Ltd., Aintree Rd., Bootle L20 9DL, U.K. Tel 051-922 2291.

3559589—FRANCE—Tools for mfg. electronic components created 1973. Currently capitalized at 30,000 francs, employs 1 & has 1 traveling salesman. Sales territory France & Belgium. Represents Vaponics, Inc., Plymouth, Mass.; Solid State Equip. Corp., Fort Washington, Pa.; & Kras Inc., Fairless Hill, Pa. Operating satisfactorily. Good credit appraisal. Bank: Societe Generale, in Courbevoie. Reply to—Mr. Michel Paul, Mgr., Seier & Paul Sarl, 42-44, Rue Kilford, 92400 Courbevoie. Telex 270L05; tel 788.02.14.

Office, computing, accounting machines

3579421—UNITED KINGDOM—Dictating systems of all types. Firm is br. of very large Philips Pye Group of companies, the largest individual member being Philips, estab. 1925. WTDR 9/73. Group employs more than 400,000 & has annual sales volume of more than $8 billion. Reply to Anthony J. Barker, Executive, Philips-Pye Offshore Group, 7 Queens Rd., Aberdeen, Scotland AB1 6YD. Tel 0224-54881; Ref: Midland Bank Ltd., Poultry & Princes St., London EC2.

Service industry machines

3585110—ITALY — Radial roof extract units. Importer & agent of axial & propeller fans, roof extract units & acoustic products & silencers for industrial & air-conditioning applications, & domestic fans. Has 24 employees, 7 traveling salesmen, 11 agents & branch in Rome. Sales territory covers Italy. Imports from U.K. & Germany & represents 4 U.K. companies for fans & heaters. Enjoys good reputation. Reply to—Roberto Biancardi, Gen. Sales Mgr., Woods Italiana S.p.A., Via Montenero 55/57, 20092 Cinisello Balsamo (Milano). Cable ITA Woods Milan; tel (02) 9272591.

Machinery

3592237—HONDURAS—Hydraulic rams, especially for irrigation systems. Annual sales potential $25,000. Covers N. & S. areas of country. Has distr. and service facilities in Tegucigalpa. Small importer/distr. wishes expand present lines to include above. Represents several U.S. firms for ag. equip. & accessories. Requests responses ASAP, quote c.i.f. Puerto Cortes, against L/C or sight draft. Wishes receive catalogs & price lists. Reply to—Jose Segovia, Mgr., Agro-Comercial Segovia, 5 Acynida 5 Calle, Comayaguela, D.C., Honduras. Cable Segovia; tel 227537.

Instruments for measurement, analysis and control

3829320—ITALY—Meteorological & ecological equip. Est. annual sales $7,500,000. Mfr. of telephone exchanges & stabilizing feeders, wishes diversify to incl. agency & distr. of above U.S. products. Has 23 employees. Sells all over Italy. Enjoys good reputation. Reply to — Roberto Ravizza, Mgr., Telmo Industrial, Via Garibaldi 57, 20061 Carugate (Milano). Tel (02) 9043173.

382932X—ITALY — Liquid crystal thermometers, thermographics. Est. annual sales potential 20,000 pieces. Mfr. & exporter of indus. & caravan stores, indus. ovens & electric household appliances & producer, importer & rep. of camping & caravan accessories. Represents 4 U.S. firms for pumps, antennas, chemical toilets & ceiling lights. Has 50 employees, 5 traveling salesmen & 12 reps. Sells in Italy, N. Africa & Arab countries. Annual vol. of business about $750,000. Enjoys good reputation. Reply to—Carlo Pozzi, Fiamma S.A.S., Via S. Rocco 18, 21013 Gallarate (Varese). Cable Fiamma Gallarate; tel (0331) 794110.

Photographic equipment

3861537—SWEDEN—Pre-recorded super-8 films (adventure & entertainment). Small co. founded in 1970 & had 1975 sales turnover Skr. 2.5 million. According to local credit sources, co. has met business obligations satisfactorily. Reply to—Mr. Bertil Uhlen, Man. Dir., Trixab Film AB, Box 9041, S-102 71 Stockholm 9. Tel: 08/84 44 50, 84 44 51.

Watches, clocks, parts

38735XX—UNITED KINGDOM—Men's & ladies wrist watches, incl. quartz. Part of Marwest Industrial Holding Group. Offers complete coverage of U.K. with own full-time sales force of about 50. Has warehousing, transport & distribution facilities for entire country. Reply ASAP to—Martin Selman, Mng. Dir., Flemming, Munroe & Co., 525 Chesham House, 29/30 Warwick St., London W1R 5RD. Tel 01-404-5011. Ref: Barclays Bank Ltd., 114 High St., London E1.

Motion pictures

7814XXX — AUSTRALIA — Pre-recorded discs for use in video tape players attached to television receivers. Mr. Coop will visit U.S. in two months. Excl. agency. Reply to—D. H. Coop, Principal, Case Consultants, 157 Walker St., North Sydney, NSW 2060. Tel 9294911.

Future Construction Abroad

INDIA—Public sector Indian Oil Corp. Ltd. (IOC) is establishing a 6 million-metric ton annual capacity **refinery** at Mathura, Uttar Pradesh State, designed to handle primary crude and process heavier products into lighter products. Important feature is Fluid Catalytic Cracker Unit (FCCU) of one million-metric ton annual capacity, chosen to substantially increase percentage yield of middle distillates—Naphtha and L.P.G. Complex design of FCCU is the reactor/stripper & regenerator section. Process design and technical know-how for this unit has been obtained from Universal Oil Products Co., Des Plaines, Ill. Process license and technical know-how for most of the other refinery units will be responsibility of USSR. Current cost estimates are $188 million. Scheduled for completion by December 1979 and in operation by April 1980. Equipment purchases valued at about $112 million; approx. $104 million will be spent on procuring equipment and materials from either USSR or indigenous sources, with imported equipment from non-USSR suppliers about $8 million. Although complete listing of items offering sales possibilities for non-USSR suppliers is not available, there will be opportunities for U.S. suppliers of safety valves, control valves, alloy and stainless steel pipes, plates, fittings, feeders, cyclone separators, volumetric flow meters, target meters, flame arrestors, temperature switches, copper tubes, pilot tubes, and pressure gauges. Engineer-construction and equipment purchaser is public sector Engineers India Ltd., Project Mgr. A. N. Singh, P.T.I. Bldg., 4th Fl., 4 Parliament St., New Delhi 110001; Telex: 031-3327, 031-2072; Cable: ENGINDIA. According to Engineers India officials, bids for equipment required for FCCU will be invited from companies appearing on Universal Oil Products Co. specs. OPIC.

The Overseas Private Investment Corp. (OPIC) offers political risk insurance to U.S. construction firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's construction insurance program, write Information Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-1854.

THAILAND—Budget of about $6.4 million has been appropriated to **expand existing women's hospital** to meet requirements of general hospital for metropolitan Bangkok population. Plan to be implemented this year with construction of 4 new buildings, one of which will be 12-story unit that will provide for an increase of the existing 400 beds to 700. Assorted medical equipment required. Contact Dr. Kamol Sinthavanich, Dir.-Gen., Department of Medical Services, Ministry of Public Health, Samsen Rd., Theves, Bangkok. OPIC.

GUINEA—Government signed $14 million credit arrangement with IBRD for **improvement of Guinea's road transport system.** IBRD loan will be supplemented by Guinean funds totaling GS 84 million. Government has chosen as project consultants Louis Berger Int'l Inc., P.O. Box 270, 100 Halstead St., East Orange, N.J. 07019, and Tractional of Brussels. Project Director for government is Manadou Cherif Diallo, Dir. Gen., Dept. of Roads & Bridges, Ministry of Public Works, Conakry. Project will consist of: rehabilitation of 2,491 Km of high priority roads, and initiation of proper maintenance; repair of existing equipment and plant and rehabilitation of workshops; purchase of highway equipment and spare parts, workshops, equipment and tools, parts for repair of existing equipment and plant. Engineering and laboratory equipment, and training material and road equipment; purchase of materials and supplies for project operations; technical assistance to Dept. of Roads and Bridges, Mining, and Geology, and implementation of rehabilitation and maintenance program as well as preparation of second phase of the program (paving), and for training of mechanics and equipment operators. Procurement of project equipment is on basis of international competitive bidding in accordance with Bank Group guidelines. Government is preparing bid documents assisted by Project Consultants. Tenders will be issued approx. May 1. Bid evaluation for purchase of equipment will take into consideration not only price, but also desirability of standardizing equipment and availability of after-sales service and spare parts. OPIC.

Firms Must Be Registered To Sell To Mexican Agencies

U.S. firms wishing to become suppliers to Mexican Government agencies and government-owned corporations are required to register with the Secretariat of National Patrimony (SEPANAL).

The vendor to official agencies may be a domestic producer, foreign producer, domestic agent or foreign agent. When possible, the government prefers direct communication with the foreign manufacturer rather than with a designated agent.

Initial registration must be accompanied by 1) a certified check to Tesoreria de la Federacion (Treasury of the Federation) for US$8 or 100 Mexican pesos; 2) a price list of the non-Mexican products offered for sale, in quadruplicate and certified by the local Mexican Consul; 3) copy of the contract with the local Mexican agent, if there is one, certified by the Mexican Consul; and 4) if the registration is tendered by someone other than the supplier firm or its representative, the authorization empowering the request.

U.S. suppliers with no representative in Mexico need only send the form and fee.

Annual re-registration is required in order to maintain eligibility. Re-registrants need pay only US$4 before Jan. 31 and US$8 after that date. A copy of Sepanal's confirmation of registration for the previous year should accompany the request. If re-registration is required by someone other than the supplier or agent, authorization must accompany it.

Official registration forms in Spanish are available from the Country Marketing Manager, Mexico/Central America, OIM, Room 4031, U.S. Department of Commerce, Washington, D.C. 20230.

Government entities buy domestic products whenever possible in accordance with long-standing import substitution policies. When products are not made in Mexico or large price differentials exist, the Committee on Public Sector Imports will approve purchases. Actual buying is done by individual agencies.

Report Issued On Mineral Resources Of Mauritania

A comprehensive, 554-page report on mineral activity in Mauritania has just been published. Illustrated with a variety of maps, it contains four sections: a history of geological mapping and minerals research; a summary of the country's geology; current prospecting activities; and a description of the principal mineral concentrations in Mauritania. The document currently is available only in French, but an English translation is planned. The contact point for those interested in purchasing the report is the Bureau de Recherches Geologigues et Minieres, Direction des Recherches Minieres et des Travaux a l'Etranger, B.P. 6009, 45018 Orleans Cedex, France. P-76193.

Visiting Buyers and Officials

REUNION — Mahmud Dindar, Owner, Societe Dindar Confort S.A., one of the largest import distribution firms on Island of Reunion (French Indian Ocean Territory) plans visit to U.S. the second-half of May. Wishes to contact major American manufacturers of **radios, hi-fidelity equipment, magnetoscopes and other electrical products.** Since Reunion is an integral part of France, customs duties and regulations are same as for France. There are no restrictions on volume of goods that may be imported. For further information contact Paulette Wolfson, U.S. Department of Commerce, Room 2322, Washington, D.C. 20230, 202-377-3265.

AUSTRALIA — Ross L. Brown of Ross Brown (Sales) PTY. Ltd., Sydney, plans to visit U.S. in May. Interested particularly in **gauges and controls** for domestic and industrial natural gas installations as well as in safety, relief, check, non-return and constant speed unlocking **valves.** Contact Terry Rettig, Room 2322, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-3265.

SWEDEN—R. Kenneth Linder of Instrumenttjanst Linder and Co., Ab Lyckeslevagen 60, S-162 25 Vallingby, tentatively plans to be in U.S. to about mid-April. Seeking suppliers of **testing, electrical and electronics equipment** as well as **multimeters and measuring instruments.** Contact Terry Rettig, address above.

AUSTRALIA—Neal R. Jensen, Manager, Specialized Protectives Co., 1 Arthur St., Libcombe, N.S.W. 2141, plans to arrive in San Francisco April 18. Will also visit Buffalo, Chicago, Las Vegas and Los Angeles. Interested in becoming distributor or trained applicator for **specialized and new protective coatings.** Contact Terry Rettig, address above.

☆ U.S. Government Printing Office: 1975, 210-924/20

Commerce Building 14th Street and Constitution Ave., NW.,
Washington, D.C. 20230, (202) 377-2000

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District Offices

Albuquerque, N.M., 87101, Room 316, U.S. Courthouse (505) 766-2386.

Anchorage, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-5307.

Atlanta, 30309, Suite 600, 1365 Peachtree St., N.E. (404) 526-6000.

Baltimore, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

Birmingham, Ala., 35205, Suite 200-201. 908 S. 20th St. (205) 254-1331.

Boston, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

Buffalo, N.Y., 14202, Room 1312, Federal Bldg., 111 W. Huron St. (716) 842-3208.

Charleston, W.Va., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

Cheyenne, Wyo., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. (307) 778-2151.

Chicago, 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

Cincinnati, 45202, 10504 Federal Office Bldg., 550 Main St. (513) 684-2944.

Cleveland, 44114, Room 600, 666 Euclid Ave. (216) 522-4750.

Columbia, S.C., 29204, Forest Center, 2611 Forest Dr. (803) 765-5345.

Dallas, 75242, Room 7A5, 1100 Commerce St. (214) 749-1515.

Denver, 80202, Room 165, New Custom House, 19th and Stout Sts. (303) 837-3246.

Des Moines, Iowa, 50309, 609 Federal Bldg., 210 Walnut St. (515) 284-4222.

Detroit, 48226, 445 Federal Bldg., 231 W. Lafayette (313) 226-3650.

Greensboro, N.C. 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 275-9111, Ext. 345.

Hartford, Conn., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

Honolulu, 96813, 286 Alexander Young Bldg., 1015 Bishop St. (808) 546-8694.

Houston, 77002, 1017 Old Federal Bldg., 201 Fannin St. (713) 226-4231.

Indianapolis, 46204, 357 U.S. Courthouse & Federal Office Bldg., 46 E. Ohio St. (317) 269-6214.

Los Angeles, 90049, 11777 San Vicente Blvd. (213) 824-7591.

Memphis, 38103, Room 710, 147 Jefferson Ave., (901) 534-3213.

Miami, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

Milwaukee, 53202, 605 Federal Office Bldg., 517 E. Wisconsin Ave. (414) 224-3473.

Minneapolis, 55401, 218 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

New Orleans, 70130, Room 432, International Trade Mart, 2 Canal St. (504) 589-6546.

New York, 10007, 37th Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

Newark, N.J., 07102, Gateway Bldg. (4th floor) Market St. & Penn Plaza (201) 645-6214.

Omaha, Neb., 68102, 1815 Capitol Ave., Suite 703A (402) 221-3665.

Philadelphia, 19106, 9448 Federal Bldg., 600 Arch St. (215) 597-2850.

Phoenix, Ariz., 85004, 508 Greater Arizona Savings Bldg., 112 N. Central Ave. (602) 261-3285.

Pittsburgh, 15222, 2002 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

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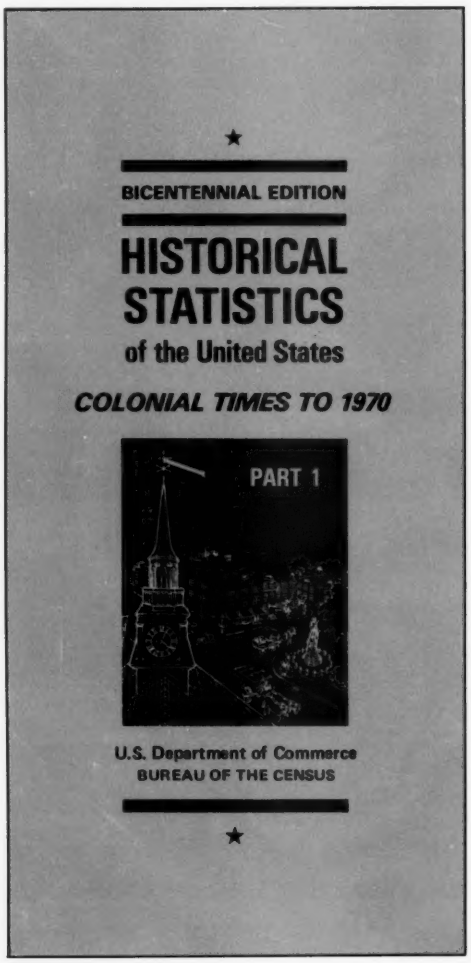

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